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Lecture.

DISEASES OF THE HEART—CONTINUED.

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I told you, in speaking of hypertrophy, that I would show you a heart that is, probably, the largest that has been noticed in this country. This is the specimen. There are several interesting things about this: first, that it is, probably, the largest heart that has been seen in this land; second, its history is well preserved. I gave you the history in a previous lecture. He could carry this large heart only because he grew up with it. These large hearts, as far as I have noticed, always begin to be diseased in early childhood, possibly in infancy, and the person becomes accustomed to the extraordinary development of it, and so it gives little inconvenience. It grows with his growth, and may attain this monstrous size.

I told you, when speaking of pericarditis. that I would exhibit to you a heart to which the pericardium was attached. You observe here is the pericardium, and it is attached to the heart. The patient had had endocarditis and pericarditis, and this is an instance in which we can pretty safely say we have twenty-two years from the development of the pericarditis till death. You will see the manner in which the pericardium is trying to separate itself from the heart. By just raising up the flap of this pericardium on either side you will see threads running from one side to the other. They have been considerably torn up by handling, but still I think you will notice them better on the upper side. This pericardium, had the man lived long enough, would have been separate. The attachment, as you see, is loose. Then, as a specimen of aortic disease it is extraordinary. Opening the aorta by "its ears," and getting down to the valves, you see they are thick and leathery. They are more than a line in thickness, nearly an eighth of an inch in thickness, and they are much distorted, and they are, you see, quite incapable of performing their office. They feel hard, like sole leather. Then the right auricle, together with the right ventricle, you observe, is somewhat dilated, but very much encroached upon by the septum ventriculorum. The mitral valve is not so very much diseased. That is to say, its offices are not very much hindered. It is thick, scarcely leathery, its posterior valve is contracted. It is contracted considerably, and I am not sure that it would perform its office perfectly. But the amount of disease there is trifling, compared with that which affects the aortic valves. That, I suppose, the boys would call a "bully" heart.

Here is "bully" No. 2. Here, too, has been pericarditis. You observe how rough the heart is. There is something of that thready appearance, not so much however as in the other specimen, in this pericardium. I do not know the history of this case as I do of that, but you observe here is very marked shortening of the valve. That valve is not one-half its proper height, and it would be impossible for its parts to meet in the middle of the artery and prevent regurgitation. In this instance the right heart is more hypertrophied than the left, that is, in proportion to its natural thickness the walls are thicker, and in regard to capacity it seems to be just about as

great as the left. The thickening here is quite remarkable. The tricuspid valve does not seem to be diseased. The aortic valve is firm, and shortened to a certain extent, and here again the posterior more than the anterior curtain of the valve. But the great defects, or rather the principal diseases of the heart, are the hypertrophy, particularly of the right side, and the valvular disease at the aortic opening. The pulmonary valves are about natural.

Here is another specimen of marked hypertrophy, and here again you observe a (septum) of the aortic valve thickened and drawn down. The valves, you observe, are very imperfect, and allowed regurgitation, while the mitral valve is in tolerably good condition. The right ventricle is small, comparatively. It will not hold one-half, it will hardly hold a quarter of what the left will, and that of itself is a kind of disease. The blood can be thrown out from the left heart a great deal more rapidly than it can be received by the right; and the result is exactly the same as when the valves are defective.

I was speaking to you, when we were last together, of dilatation. I had begun to describe to you the peculiarities of that disorder of the heart. We will go on with that, and I will show you at our next meeting a specimen that is rather striking; a dilated heart, in which, if I remember right, all the cavities are dilated, and they are stuffed with hair, so that the heart has about the size that it had in life, and yet in the cuts made into the walls you will see to what a very marked thinness it has been reduced.

Dilatation, I told you, considering it in the sense in which we are using the word now, is a thinning of the walls of the heart. We have hypertrophy with dilatation, in which there may be considerable thickening of the walls of the heart, but this is spoken of by a distinctive name. We now refer to simple dilatation of the heart, in which the walls of the heart, of the left side, come to be little more than a line in thickness. The walls of the right (?) heart are from five to three lines in thickness in the normal state, that is, five at about half an inch from the base, and growing a little thicker toward the apex, and at the apex three lines in thickness. But this heart that I shall exhibit to you on Friday will give less than a line in thickness of any portion of the left ventricular wall.

The first question that presents itself to us is, how can this thinning occur? A good many speculations have been offered in explanation of this occurrence, but I am inclined to think that the German explanation is the best; that it may occur in two different ways: First, by a reflux of blood when the blood is in a non-nutritive state, dilating the natural walls of the heart till they are thinned down to what I shall exhibit to you; the other, that hypertrophy with dilatation may have occurred, and that by fatty degeneration, which I shall explain to you a little further on, the material constituting the muscle of the heart may be absorbed, taken up, carried away, leaving very little but the two serous membranes, the endocardium and the pericardium. That implies, of course, very marked feebleness in the heart's action. Simple dilatation of the heart to the extent to become a disease is a rare occurrence. I have met with two or three cases, and that is all.

The indications of it, the means of recognizing it during life, are both physical and rational. Among the physical signs will be one that belongs to hypertrophy, extended region of dullness. The lungs will be pushed away, in the same way, from their natural position, and in auscultation for the respiration you will find it silent over the dilated heart. That is, the lung is pushed so far away that the sounds of respiration will not be brought to the ear placed in the midddle portion of the pericardial region. There is no palpitation proper. It frequently happens, however, that the patient complains of palpitation. His sensitiveness is increased at the same time that the action of the heart is rendered feebler; though he complain of palpitation you put your hand over the heart, and you can scarcely feel it beat. In one case that I saw, it was very remarkable that the contraction of the heart was in a wave. It was not a sudden contraction of all the muscles of the heart at the same moment, but the contractile effort seemed to pass up under the hand. Beginning below, I could feel the wave pass the length of my hand. That is, so far as it was applied to the intercostal spaces. I could not feel it, of course, through the ribs, but the intercostal spaces being thin, as I exerted some pressure they would indicate to my hand the kind of action that was taking place in the heart.

A feeble beat of the heart, then, with an increased region of dullness, and a consideration of the kind of sound, will be the chief physical signs. The sounds of the heart are changed in relation to each other; the time is changed, or the rhythm, as it is called. As the heart beats naturally, the second sound follows instantly upon the cessation of the first, and then there is a period of rest, about as long as the period occupied by the first and second sounds together. In this condition you are very apt to

have the motion of the heart, or rather the sounds of the heart, resembling the ticking of a watch, the first and second sounds at even distances apart. The first sound is short, scarcely exceeds in duration the second. Tick, tack; tick, tack; in about that relation.

Then the appearance of the patient gives a marked indication of dilatation. The force with which the heart contracts upon the blood is so far diminished that only a small quantity is sent into the arteries at any one beat, at any one time. This does not dilate the arteries, does not keep them of their natural size. They are apt to grow small, therefore, I referred the other day to the filling of the ventricle during the period of rest of the heart. I perhaps should have said the ventricle has no power of dilating itself. but it is dilated by the force that it has impressed upon the blood when it went out from it into the arteries. The residual force of the circulation when the blood returns to the heart is really the dilating power. In that sense it dilates itself. The venous power is considerable, as when we tie the arm to bleed a man the force of the current is such as to throw the blood quite a considerable distance from the arm. This force is not all exhausted when it comes to the right heart, and it is that residual force impressed upon the circulation by the contraction of the left side that opens the right. In this case now, and so contrariwise, the force impressed upon the blood going out of the right side of the heart opens the left ventricle, or causes the left auricle to fill, and thus is really the cause of the filling of the left ventricle. Now, in this dilated heart you have a very feeble force impressed upon the blood when it comes out of either dilated ventricle. It will, of course, flow into the opposite ventricle in an equally feeble stream. It will dilate the veins, because there is not force enough behind to empty them, and you get œdema of the face, of the feet, and of the surface of the body, and you get at the same time enlarged veins; the blood seems to rest in the veins. Of course, it does not absolutely rest, but the current is slow.

The oppression of the breathing is very marked in these cases. It belongs to almost every form of disease of the heart, but is developed earlier, and is, perhaps, more severe in this than in any other, and that depends upon the failing force with which the blood can be circulated through the lungs. There are at least three distinct causes of dyspnœa besides the nervous causes that would produce the same thing. One is, an overcharged or congested lung, or lungs; another, very slow circulation of the blood through the lungs; and the other, some physical obstacle to the dilatation of the lungs by the air entering them. These three conditions all produce dyspnœa more or less severe, and why? You would suppose that, mechanically, they would not act in the same way. Mechanically they do not, but physiologically they do. They each one interfere with the aëration of the blood. When the lungs are congested the blood is circulating slowly through them, and though the blood that is in the lungs may become aërated it is not given to the system with sufficient rapidity to answer the demands, and consequently a sense of dyspnœa. And then, too, when the quantity circulating through the lungs is very small and the current slow, there is not enough aëration of the bulk of the circulating blood, and there is dyspnœa. Then, when both pleuritic cavities are filled with serous fluid, or any other fluid, and the lung room is not great enough, there is not space for very much aëration of blood, and there is dyspnœa. And these three conditions of the lungs explain most of the dyspnœas that occur with the diseases of the heart, and in none of them is that dyspnœa more perceived, more apt to cause suffering, than in this dilatation of the heart. These are the leading facts by which you are able to recognize simple dilatation of the heart, if you should happen to meet it.

With reference to its treatment, I will say a word, because there is something to be said in regard to this that does not belong to all forms of diseases of the heart. I see recommended in some of the text books, and in special papers on this affection, as a means of relief, bleeding; bleeding from the arm. Well, I will tell you my experience. When I was house physician in New York hospital, a man came in in whom we recognized dilatation of the heart, and it was in that particular man that I got that wavy motion of the contracticle fibres of the heart. My principal, seeing how much he suffered, said bleed him. I looked at him with surprise, and said, "Doctor, I would not dare to bleed him. He cannot lose five ounces of blood without dying." "Pooh, pooh?" says he. "If you don't like to bleed him, give me the lancet." He tied up the arm and took the lancet—I was accessory in holding the bowl—and the vein was opened. The man bled a little spurt, it may have been four or five, possibly six ounces, and rolled over on the bed—I had him sit on the bed on purpose—rolled over on the bed and breathed no more. Of course that did not make me very much in love with bleeding for dilatation of the heart. And yet, even in Niemeyer, if I remember right,

it is recommended, but, I suppose, theoretically, inasmuch as bleeding does in some conditions of dyspnœa give relief. But I do not think it applicable to the dyspnœa which arises from dilatation of the heart. Well, then, there is very little you can do. The man cannot take any exercise. He would drop down of dyspnœa if he were to make any great exertion. He may walk about the ward a little, if he is in a hospital, or in his room, if at home; but that is about all he can do. He cannot go up stairs, and can scarcely go down. About all that you can do is to induce him to take as much food as he can digest, with the hope of enriching the blood a little, and delaying the progress of the disease; to give him chalybeates, which will help in this change of the condition of the blood, almost any form of iron that is a favorite with you, it matters very little, for they all go to about the same thing; and create an active condition of the kidneys, to carry off the œdema. This latter is applicable to almost all the forms of cardiac disease where dropsy has occurred. I shall recur to the matter of diuretics by and by.

With these remarks on dilatation of the heart, we will leave that subject and turn to another condition of disease of this organ. You hear a great deal about fatty degeneration of the heart. You will hear a great deal more than you will see. I scarcely see a fat man advanced somewhat in years, who has trouble with the heart, that the attending physician does not say, "Why, Doctor, don't you think he has got fatty degeneration of the heart?" My reply is uniform, "I cannot diagnosticate fatty degeneration of the heart, and I have no right to assume it in any case without proof." You will see where the difficulty lies pretty soon. Fatty degeneration, to the extent of producing real disease, is quite a rare occurrence; occurring, to be sure, now and then, but in comparing it with dilatation and hypertrophy together, it hardly bears the relation of one to fifty.

There are two kinds of fatty degeneration of this organ. One I have sometimes designated as adipose degeneration, or adipose deposit upon the heart. The other is an integral degeneration of the muscle of the heart into fat. The latter is called, commonly, Quain's degeneration, as he was the first to describe it—the author of the anatomy that was very much in vogue twenty years ago. The two are very easily distinguished by the appearance after death. But neither of them can be confidently recognized during life. The latter, Quain's disease, you will be more likely to distinguish than the other. The fatty degeneration of the adipose variety is merely a deposit of fat upon the surface of the heart. I have some better specimens than this, which I can show you, perhaps, at our next meeting, though this is well enough marked to give you an idea of what is meant by it. Always there is some fat upon the exterior of the heart in the pericardium, but you will observe, in examining this specimen, that here it has encroached somewhat upon the muscular element of the organ. The whole heart is covered with a more or less abundant layer of fatty tissue, but chiefly upon the right side. Well, that is the part of the heart that is most commonly overloaded with this fat. You take a portion of this fat and examine it under the microscope, and it will present exactly the same appearance as adipose tissue taken from any other portion of the body—a multitude of cells filled with oil. It is a healthy fat enough, but a dislocation; it is out of place here. It is out of place here, for the reason that, as it becomes abundant the muscular heart becomes weakened. But many persons, no doubt, carry this condition for a considerable time without knowing anything about it. The heart performs its office with fair regularity and with fair force. But in a few instances it will happen that the fatty encroachment is unequal, and it weakens one part of the heart more than another; as, for example the septum, ventriculorum may be just as strong as it ever was, while the wall opposite is weakened. The result is, that the heart sometimes gives way first at that point; at the point where the greatest weakness of its muscular tissue is it bursts itself. I will refer to that again a little further along. This is the heart, then, and you may examine it and see what it means. The fat is very abundant upon the base, but that does not do so much harm as that deposited along the course of the ventricular wall. The heart is also hypertrophied.

I told you the heart beats with perfect regularity, and that it is not enlarged in any such degree as that you can recognize it by physical signs. Well, then, how can you recognize it at all? Well, just make up your minds, now, and forever, that you cannot recognize it, except after death. And we will not spend a great deal of time in talking about fatty degeneration of the heart, when you cannot tell what is the matter with the patient when he has it.

Now, the other kind is altogether different in its effects upon the heart, and altogether different in its pathological aspect. The heart muscle is a striped muscle. It has cross markings, lines in the direction of its length, and lines across, dividing those muscles, as the muscles of the

arm and leg, and all the voluntary muscles of the body are, into little checks. Well, these checks, when Quain's degeneration occurs, come to hold first a little oil globule. A muscular element seems to be removed from it. The place of the muscular element is taken by oil drops, minute, microscopic drops. I can show you a plate the next time, that will, perhaps, give you a better idea than any of my splendid drawings, but you may get some idea of it from this drawing. Well, then, this sort of heart has become useless. No, not quite, because this sort of degeneration is unequal in the walls of the cavities. It will be here marked, and at another place scarcely noticeable. The result of this production of oil within a muscle, covering the sarcolemma, is to change the color of the heart, and to change its consistency. Here, for example, are three specimens of this kind of degeneration. This one is not so very much softened. It seems to be small. The walls of the heart are thin, but the cavities are not dilated. The peculiar color that the oil gives to it is noticably yellow. Here is another which is soft and yellow, and the walls of the heart are a little thinned, but not reduced so much as that you would be able to recognize it during life. And here are several other specimens which you will examine wi h regard to color, etc.

In regard to the recognition of this form of disease, it is more nearly possible than to recognize an adipose deposit upon the exterior of the heart. For example, I was called to see a lady, not quite middle aged, in whom there was marked irregularity in the action of the heart. I measured its size; that was natural. She was of an age that would hardly admit of the supposition that she had bony degeneration of the heart structure. That belongs to advanced age. She was not more than thirty, or perhaps thirty-five. She could lie down flat in bed, that is to say, she could lie down on her back without any pillow or bolster, and felt better in that position than with her head raised. She was dizzy, and disposed to faint when she walked about, and particularly when she made any exertion. The peculiar irregularity—I say peculiar; I do not know that that is the proper name—the marked irregularity, the irregular irregularity in her heart fixed on my mind that there was some disease of it. In using that expression, irregular irregularity, I ought perhaps to define it. When a heart beats on for five, six, or seven minutes, and then drops a beat, that is an irregularity; but there is a certain degree of regularity in its recurrence. You may count a certain pulse, and find that the sixth is dropped through a whole minute. But when there comes a kind of irregularity, that you cannot describe, when the heart beats perhaps rapidly in this way and then holds up, beats slowly, and then directly begins with a sort of fluttering that is hardly describable in words, that is what I mean by irregular irregularity as contrasted with the regular recurrence of certain phenomena in the action of the heart. Well, this lady had that. The heart beat with an irregularity that is hard to describe. Now, it will be well for you to remember that that belongs to some particular disease of the heart; that that particular irregularity, that you cannot well describe, does not come of mere functional disturbance, but is always, as far as my memory goes, associated with a change of some kind in the structure of the heart or its valves. I said to the Doctor who called me in, "I am confident there is some disease of the heart here, but I cannot tell what it is." Had I known the fact that in this kind of degeneration it is not uncommon that patients can lie down with the head low in bed, and feel better than when the head is raised, I might perhaps have made a reasonable conjecture. But at that time I did not know it—thirty or forty years ago. This lady died, and we had a post-mortem examination, and the heart I think is one of these. I examined various portions of it under the microscope, and found the kind of degeneration that I have been trying to describe to you, more or less in all the parts of its walls. But it was very marked, more marked than anywhere else, in the fleshy columns, and this perhaps was one reason of the marked irregularity. They performed their office very imperfectly, and by sympathy disordered the heart.

This kind of degeneration is, again, of rather rare occurrence. It may occur at any age. It may occur upon hypertrophied and dilated hearts, and it may occur upon hearts that are perfectly normal in size and up to the time of its occurrence perform their function perfectly.

I do not know what causes this Quain's degeneration. It is something connected with the nutrition, the nerves of the organ. Persons who have it do not become œdematous, they do not become always very pale. This lady that I referred to was pale and icteric, but I did not refer the icteric element to the heart, unless perhaps the liver was deranged by imperfect circulation of blood through it.

As to the treatment of this particular form, if you make it out, there is but little. A rather extraordinary recommendation has been given,

however, by one physician of some authority, and that is to make the patient to run up-stairs. I think it would kill more than it wou'd cure. The idea is to make the heart active, and to cause it to be nourished by healthy muscular tissue in that way. But my own opinion is that it cannot be done. The treatment that I should adopt, and have recommended in cases where this disease was suspected, is of an entirely different character. It is aimed at causing the absorption of the fatty matter, and reduction of the supply of fat in the body; for example, the patients, as in two or three other forms of disease that depend upon fatty disorders that I shall describe to you further on, are directed to take moderate exercise, to walk upon the level ground, or upon the floor of the house, and take, according to their strength, the exercise they can endure. The second element of the treatment is absence from all fatty food, including butter, milk, cream, fat of meats, and in a manner all fatty food. I sometimes allow them enough of milk to flavor their tea or coffee, but nothing beyond that. Only lean meats, and the vegetable foods that contain the least oily matter. Well, the grains: perhaps you ask whether they contain oily matter; yes, they contain oily matter. Wheat contains about three per cent.; Indian meal contains about ten per cent.—that is the reason it fattens the hogs so fast. Then I should prescribe food made from wheaten flour rather than from Indian meal. And next, and perhaps the most important element in it, is to administer the bicarbonate of soda, and to administer it to such a degree as it will be borne, and that fact to be judged of by a daily examination of the urine. In giving alkalies you are to bear in mind that some of them have the power of producing calculi in the kidneys or bladder, but there is no danger of their producing anything of this sort as long as the urine is in the slightest degree acid. Furnish your patient, then, with slips of litmus paper, to be kept in a convenient place, as in a box about two inches and a half long and an inch and a half wide, and let the patient take every morning, or every evening (better in the evening), one of these papers by one of its ends and dip the other in the water, and when it comes out, is it red, or is it purple? If it is purple the patient is taking too much soda; if it is in a very slight degree red, that is all right; if it is very red, he is not taking enough; give more. And in this way, from day to day, by applying the test, you may give what will be safely borne and what will produce most effect upon the fatty degeneration of any kind in the body of the patient. I do not know from experience that it will do any good in this kind of fatty degeneration; but it does so much good in other kinds of fatty degeneration that I deem it important that it be tried. Of course, the most nourishing food that the patient can take is to be preferred; beef and mutton, all lean, and not excluding chicken and fowls of various sorts. Any good wholesome meat food is better than vegetable food in this case; at the same time some vegetable food may be taken.

COMMUNICATIONS.

A NEW MEDICAL SPECIALTY.

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In the olden time the physician was his own pharmacist—that is, he was obliged to prepare and dispense his own medicine. But the duty becoming too laborious, on account of the growth of science, it was entrusted to an assistant. The assistant chosen was the apothecary. Now, the business of the apothecary has been, from time immemorial, to sell drugs; and it was not until a more recent date that he was also entrusted with the new and responsible duty of assisting the doctor. It is now claimed by the medical profession that the apothecary is violating his trust; and that the violation consists in that he is doing other business beside assisting the physician. He is accused of selling drugs without an order from the doctor, and in the irregular forms of patent medicines, trade-mark pharmaceuticals, etc. he is blamed for prescribing over the counter, and for renewing prescriptions at the request of the public, to whom the law declares the prescription belongs. Is the apothecary at fault for this? Is he not a merchant in drugs, as in the olden time? If a merchant only, he owes no allegiance, and is not amenable, to the medical profession, or any other sect or profession. His relations are entirely with the general public. What the public demands he must do. If the public demand of him drugs, fancy goods, soda water, patent medicines, a few groceries, whisky and segars, should he be blamed for selling them? If the people also ask him to renew their prescriptions, they do not belong to the doctor, and has he any right in the matter? Surely the people do not recognize that right, if it exists. These are vital questions, and until they can be satisfactorily answered it is easy to see the position which the apothecary must hold in relation to the medical profession.

The next question is, what shall the doctor do,

under the circumstances? Discharge his assistant and employ a new one, or retain the old? But this question is being answered for the physician by the evolution of events. Pharmacy has become too burdensome to the apothecary, as to the physician of old, and he has delegated it to the manufacturing pharmacist. The enormous growth of the business of the manufacturers during the past decade proves that this transition is now going on, and the correctness of this statement. It is important, then, that the profession should know more about the manufacturers, their polity, and their relations to the medical profession. Are they merchants, too, doing business with the general public? If so they owe no greater allegiance to the medical profession than the apothecary. If, on the contrary, manufacturing pharmacists claim to be a branch of scientific medicine, they should conform to the rules which govern a scientific profession.

I do not know what policy the manufacturers have adopted in this matter, but judging from their declaration of love for science, and affectionate regard for the physician, the profession are led to believe that they are what they certainly attempt to convey by their assertion, scientific pharmacists. Arguing, then, that this is the fact, manufacturers owe their allegiance to the medical profession, and have no right to interfere with the physician's prerogatives. The medical profession, however, will have to arraign certain of these manufacturing houses on the charge of not only interfering with the physician's prerogative, but also of attempting to usurp his province of treating the sick. But first, why have they not a right to treat the sick? The answer is simple. Because they are not physicians, either by education or training. If physicians, would they not have the right to practice medicine and pharmacy both? I answer, yes, under the same rules and regulations which govern the medical profession, but not otherwise. But they are charged with practicing medicine without a medical education; and also of using unfair means of competing with the doctor. Counsel for the profession will support this charge by the plea that certain manufacturing pharmacists are preparing for and advertising ready-made prescriptions to the public; that they send out medicines under ingenious names, protected by trade-marks and patents, and then solicit the doctor to prescribe the same; but that these trade-mark pharmaceuticals are accompanied with labels, and circulars, carefully worded to catch the public eye; that they are advertised in the secular and religious press; and as if to exasperate the profession still further, it is claimed that this whole system of abuse is cordially sanctioned by the medical profession. This attempt to obtain the public patronage belonging to the medical profession is too apparent for controversy. That it is the exclusive prerogative of the physician to treat the sick some may be disposed to deny. They may claim that prescribing druggists, quacks, old women, and patent medicine men share equal privilege with an educated profession; but no fair mind can excuse this contemptible hypocrisy, which, under the guise of friendship, seeks to undermine the medical profession.

What will become of the physician if this condition of affairs is allowed to go on? It is a rivalry of organized executive ability against an unorganized, impoverished profession. Upon one side is all the machinery of trade, facilities for marketing goods and creating a demand for them by advertising; on the other a profession who have neither the time nor opportunity for trade. Is not the answer apparent? When the medical profession, forced into adopting trade to gain a livelihood, are prevented from devoting their time to the investigation of disease and means of cure, the wheels of progress will be clogged, and the advance of science greatly hindered thereby.

What shall the physician do, then, for his own protection? Beset with powerful foes, behind and before, there seems to be but a poor showing for him. To answer this question it is necessary to look at this subject from a new and entirely different standpoint. It is the relation between trade and science, which, entering into this question, greatly complicates the matter.

A clear line of demarkation should be drawn between trade and science. They are exactly opposite in their tendencies, and it is the attempt that is being made to mix up trade with science that is causing all, or at least a great deal, of the trouble and feeling between the medical profession and the drug trade. For the sake of illustration, trade can be represented by protection, science by free-trade. Science professes to exhibit what is actually known or may be learned by exact observation, precise definition, fixed terminology, classified arrangement and rational explanation. It is impossible to satisfy the demands of science by any system of protection, as science demands the publication of the whole truth, and its classification into the forms of science, for the benefit of the world.

The whole tendency of trade, however, is a selfish one. Trade seeks to protect her own interest without regard to others. While science

is laboriously delving in the mine of knowledge, to dig out the ore, trade coins it into money. But greedy trade, instead of coöperating with science, for mutual benefit, seeks not only to monopolize all the money, but all the knowledge as well, forgetting her debt to science.

Take this illustration and apply it to the scheme already referred to, and the tendency of trade will become apparent. As before shown, it kills the miner; but in addition to this it locks up the mine. Let me illustrate! What would have become of science if heat, light, electricity and all other forces had been patented when first discovered? Would not trade have locked up these forces and prevented their investigation? The patent law was designed for the protection of science in this matter, by offering the inventor seventeen years' control of his invention, in exchange for its publication. The patent law was not intended to lock up forces from investigation, but, on the contrary, to encourage the investigation of forces. While it does not patent electricity, it protects the inventor of a dynamo-electric machine. Medicine is a curative force, and should not be patented, any more than heat, light, or other forces. By patenting medicine scientific progress is hindered, trade is injured, and the interests of suffering humanity are sacrificed. To this may be answered, that the patent is granted upon certain compounds only, not upon the drug itself. I answer, yes, but the compound becomes, to all intents and purposes, the same as a new drug, and the control thus gained permits unprincipled manufacturers to create a demand far above real worth, by advertising cures only. Honorable trade is thus thrown into disrepute. Legitimate competition is the cure for this.

Now, I claim that pharmacy is a science, or rather, a branch of a science, and should be so regarded. It should be separated from trade, otherwise it will be eventually locked up by trade, and scientific progress rendered well nigh impossible. And this is very important to the medical profession, as pharmacy is a branch of the science of medicine. Pharmacy, according to Dunglison, "is the art which teaches the knowledge, choice, preservation, preparation and combination of medicines." The practice of this art might have been at one time the province of the apothecary, but at the present time it is not carried on exclusively by any one class of individuals. The several functions which together constitute the practice of pharmacy are divided up among the drug brokers, wholesale druggists, manufacturing pharmacists and apothecaries. The drug brokers and the wholesale druggists select the drug and carry it in stock, the manufacturers make it up into pharmaceutical preparations, and the apothecaries dispense it. Some of the manufacturers are combining in their business all of these functions, and they should be looked upon as the nearest approach to the ideal. These houses select their own drugs, often import them, and sometimes even send accredited agents to the source of supply, to gather them, under the most favorable conditions of climate, soil and season. Manufactured into the regular forms of the pharmacopœia, they are dispensed to the apothecary, and by him, in turn, to the patient, upon the prescription of the doctor.

Manufacturers, however, are not practicing pharmacy as a profession, but as a trade. By this I mean that these houses are running their business upon a trade basis, not a scientific basis. If they were on a scientific basis, they would publish all their different methods of manipulation for the benefit of science. They would have no trade secrets whatever. They would tell just how they sugar coated pills, the best way to gelatin coat pills, and every other little manipulation of the kind. They would not only furnish this information to those who might ask it, but they would take particular pains that it should become items of scientific information, and the public property of the profession which they are supposed to represent. Otherwise they cannot be regarded as scientific pharmacists.

This being necessary to constitute a scientist, have we any scientific pharmacists? I claim not, at least as a class. The business of the apothecary cannot stand this test, though there are apothecaries that take this stand. The business of the manufacturers cannot stand this test, though there may be an exception. One manufacturer with whom I talked said that though he was willing to publish all formulæ, and as a rule did so, yet he did most assuredly object to giving every lazy competitor the benefit of his enterprise and skill.

But pharmacy as a business being on a trade basis, and therefore subject to trade tendencies, what is to become of pharmacy as a science? As already stated, pharmacy is a branch of the science of medicine. It is necessary to be learned in all the branches of a science to be thoroughly versed in any one branch of that science. A pharmacist must be, therefore, a physician. To be scientific he must publish the results of his investigations for the benefit of his profession. But such a publication is not always compatible

with trade. A scientific pharmacist should not, therefore, be a tradesman. There is a demand, then, for scientific physicians, educated in pharmacy, to take up pharmacy as a science. Is there not room here for a new medical specialty? The physician did not give up his right to make pharmacy a study, by employing an assistant. He cannot expect his assistant, uneducated in medicine, to be proficient in the investigation of drugs. He must possess an accurate knowledge of every property which they possess, physical, chemical, therapeutical, physiological and pharmaceutical, to justify him in any original investigation of his own.

The province of this specialty should be to investigate drugs, with the view of classifying them for the benefit of science. Every new drug brought to the notice of the physician by trade should be thoroughly tested, and the results of these tests furnished to the physician. Of course, patients should not be experimented upon with unknown drugs, without sufficient reason to justify their use; but valuable drugs have come to us from unscientific sources. Because a drug is used by a quack, an Indian medicine man, or an old woman is no proof that it is devoid of virtue; and when it is the universal belief of all old women that certain herbs possess certain virtues, we are just as much justified in trying them, to see if this belief is founded on fact, as were our grandfathers, who collected the best of them to make a pharmacopœia.

Hospital physicians, especially, should take up this line of work, for in the hospitals there is a better chance to observe cases. Not one hospital, only, but many hospitals, should investigate the same drug, for in that way comparative results can be ascertained, and the true worth of the drug made known.

Finally, let trade and science unite in this commendable work, for it is for mutual benefit. The knowledge of new drugs will be a benefit to science, for by it the physician is better armed and equipped to combat disease, and now and then a valuable gem is picked up, which otherwise would have been lost to the world. A publication of the truth regarding new drugs is beneficial to trade, as it increases the demand for good drugs, which trade only can supply.

—*Punch* is responsible for the following:—

Says Aaron to Moses:
"I've got trichinosis."
Says Moses to Aaron:
"'T is because you pork fare on."

ON THE USE OF THE OBSTETRICAL FORCEPS.

BY T. C. WALLACE, M.D.,

Of Cambridge, N. Y.

A paper read before The Union Medical Association, at Eagle Bridge, N. Y.

GENTLEMEN—To any one who has been an observant reader of medical literature, it must be evident that, especially for the past few years, the aim of the profession, and particularly of its leading members and teachers, has been to develop something novel. Disdaining the beaten track of our fathers, the striving has been for new remedies, different instruments, and novel appliances, and the claim invariably made for every new thing thus developed is, that it is a great improvement. Is this claim always justified?

For the past twenty years the medical press has teemed with glowing accounts of new remedies, whose virtues have been extolled until it would seem that a certain antidote for every human ailment has been found, and that a physician who, with such certain remedies at his command, allows any one to be sick longer than a few days must be "behind the times," and that the physician who suffers a patient to die must necessarily be himself to blame. Now (without denying that progress has been made), I ask, of these much vaunted remedies, how many are today in use? How many have demonstrated a practical value? How many more reliable remedies have we at our command than had our immediate predecessors?

In no department of medicine has this tendency been more manifest than in Obstetrics and Gynæcology. No one can claim to have achieved anything in this department until he has invented a new speculum, or a new pessary, or given his name to a new obstetrical forceps. As proof of this last remark, I find enumerated in the catalogue of one surgical instrument maker 66 different specula vaginæ; 84 different pessaries, and 51 different obstetrical forceps; and this catalogue does not enumerate all. Of the great majority of these last-named instruments it would, indeed, require an expert to detect any practical difference whatever.

Now, I am sufficiently conservative to avow my belief that there is virtue yet remaining in old methods, in time-honored appliances; that every new remedy is not a specific, nor every new instrument necessarily an improvement; and that often we may best serve our own interests, and most promote the welfare of our patients, by becoming familiar with the administration of long-

established remedies, and by perfecting ourselves in the use of the instruments of our fathers.

I know no more pertinent application of this belief, than the consideration of the use of the obstetrical forceps. The longer I practice medicine the more firmly established is my opinion of its inestimable value, and the oftener I resort to its use. Yet it is true (and to me it seems a lamentable truth), that very many of the profession regard its use, if not exactly with disfavor, or as something to be resorted to only in extreme cases, or when nature unaided is unable to accomplish her work. Many a practitioner skilled and ready in every other resource of our art is afraid to use the obstetrical forceps, and there is no operative procedure that has such terror to the beginner. To me, who consider its use easier than passing the catheter, and as devoid of danger as the use of the hypodermic syringe, this seems strange.

A member of this Society and an excellent practitioner recently remarked, "He thought it better for a woman to suffer, suffer severely, suffer long, and do well afterward, rather than be subjected to any operative procedure and incur perhaps lasting injury thereby." This proposition is eminently true, but is it not equally true that it is better to relieve the woman of this severe and protracted suffering by the use of the forceps, with the proviso that absolutely no injury shall be inflicted upon her or her child?

Firm believer as I am in its beneficent action, thinking, as I do, that we have at our command no instrument which is so eminently efficient in saving life and in abridging the duration of human suffering, an ardent advocate for its more frequent use, and my sole object in writing this paper being to induce my professional brethren to resort to it more freely, I am inclined to search for the cause of this general distrust.

First impressions are truly said to be lasting, and to the impressions we received while students, from our preceptors, our text books, and at our colleges, must much of this distrust be attributed. First we are met by that solid glittering *chunk* of obstetrical wisdom, "A meddlesome midwifery is bad." This is brought forward as a perfectly unanswerable argument. What is meddlesome midwifery? Webster defines the verb meddle, "to take part in a thing with which we should have nothing to do." Now labor is a physiological process which is apt to assume a pathological character. So long as it acts physiologically, we have no more business to interfere with the uterus in the discharge of its contents than we have to interfere with the rectum or bladder when they are acting normally. To do so would be to meddle, "to take part in a thing with which we should have nothing to do."

Many things commonly done in the lying-in room are "meddlesome." It is "meddlesome" to require the woman to assume a particular position, especially if that position is irksome to her. It is "meddlesome" to urge upon her quantities of warm drinks. It is "meddlesome" to introduce a finger into the anus and endeavor to pull down the head. It is "meddlesome" to tell her when to hold her breath, and when to bear down. Nature will teach her that effectually.

These and many other things often done are "meddlesome." But it is *not meddlesome* to assist nature when she is unable properly to complete her work; nor is it "meddlesome" to put her right when she is wrong. Neither is it "meddlesome" to put a speedy end to a case of tedious labor with the forceps; or, if this must be classed in your minds as "meddlesome midwifery," I respectfully submit it is *not* bad."

Similar to this is the saying so often heard, and which with many rises to the dignity of an aphorism, "Let nature take its course." The doctor is called at night to a case of labor; after examining the patient and pronouncing "everything all right," he requests to be shown a bedroom, and is soon wrapped in slumber. By and by he is aroused and informed his patient is very sick. He finds her in strong labor, perfectly agonized by the violence of the pains, and she earnestly entreats him for relief. "Can't you do something for me, Doctor?" His reply is, "let nature take its course."

How comforting, how eminently satisfactory such a reply must be to a patient so situated! What an exalted opinion she must form of the resources of the medical profession! Nature takes its course. The doctor returns to his couch and to his slumber, the woman passes hours of unspeakable agony. What are the teachings of many of our text books on this subject? Meigs says: "either the pains must have proved insufficient for their office or else the urgent demand for delivery, arising from hemorrhage, convulsions or other states, must establish the indication for their use. We should be inexcusable if we used them when the pains are still of vast force and fail of success on account of a preternatural resistance." Churchill: "that they are to be used in no case until we are perfectly satisfied that the obstacle cannot be overcome by the natural powers with safety to the mother and the child." Denman: "that the

head must rest immovable upon the perineum four hours before the forceps be resorted to." Ramsbotham: "before the forceps can be applied, the os uteri must be entirely dilated, and the head must come down into the pelvis sufficiently low to enable us to feel one or both ears distinctly. It is necessary to touch one or both ears, because they become the guide for the proper application of the forceps. Again, if no progress has been made for a number of hours, and especially if impaction has existed for six hours, then, provided an ear can be felt, and the parts are not so rigid as to endanger laceration, we are justified in using the forceps." Merriman: "that the forceps should never be applied until the ear has been in reach of the operator's finger for at least six hours."

Some authors have gone so far as to demand that there should be a cessation of pains, and that the patient should become restless, hot, thirsty, with a rapid pulse and other indications of febrile excitement, before any instrumental assistance be rendered. According to many authors the use of this instrument is fraught with great danger to mother and child. Churchill says: "the vaginal parietes may be lacerated, the blades may be pushed through the vaginal or uterine walls, the soft parts may be torn in the extraction, the os uteri may be included between the extremity of the blade and the head, the child's scalp may be bruised, or torn, or an ear cut off." Cazeaux speaks of "lesion of the cervix and perforation of the vagina; of the sudden emptying of the womb giving rise to inertia and hemorrhage." Elliott, in addition to danger to the mother, mentions, "fracture of the child's skull, peeling off the scalp, and even gouging out the eyes." Blundell: "in violent hands the large forceps is a tremendous instrument; force kills the child, bruises the soft parts; occasions mortification, breaks open the neck of the bladder, etc." So deeply impressed is he with the danger attending its use, that he counsels us frequently to count the patient's pulse, to see that she is not dying. Bedford, however, caps the climax. Among other horrors he mentions "fractured pelvic bones, separation of the symphysis, with laceration of the ligaments, rupture of the uterus and vagina, thrombus of the vulva, and pelvic abscesses." He gives in detail a case of "complete occlusion of the meatus urinarius, with adhesion of the walls of the upper fourth of the vagina, together with a vesico-vaginal fistula," all caused by a forceps delivery.

We are also led to think the application and use of the instrument an exceedingly difficult matter, and sometimes requiring unusual skill. All authors yet named direct that the blades must invariably be applied to the head in its bi-parietal diameter. No matter what the position of the head may be, "it is the position of the head which must determine the position of the blades." Hence is placed upon the operator the imperative necessity of ascertaining the exact position of the head. This is not always easy, even to the experienced practitioner. Not seldom it is difficult and uncertain, and sometimes it is impossible.

To the beginner, of course, the difficulties are vastly greater; not certain that he is correct as to the position, he is not sure his blades are rightly placed. The rules of application, of course, vary according to the position, each change of position requiring a corresponding change for the instrument. Bedford has four different rules for its introduction at the upper strait, and four at the lower. Dewees makes seven primary positions of the vertex, and has a different rule for each of these, and still others for rarer positions. Cazeaux has different directions for each of eight vertex positions: and so on with other authors. No man can possibly remember so many different rules, and the practitioner becomes hopelessly befogged. Having been thus taught that grave emergencies alone justify a resort to the forceps, that its use is often productive of fearful injury, and that its application is a matter of great difficulty, is it strange the physician, and especially the young practitioner, has a distrust of this instrument; that he should delay its application so long as he possibly can? Now, I claim (and I hope to substantiate the validity of this claim), that these teachings are wrong, all wrong, in every respect. That it is not reasonable, it is not right, to wait for any such emergencies before using our forceps; that by such delay we do gross injustice, not only to ourselves, but (what is far more important), to our suffering patients; that the injuries mentioned are never caused by the *use*, seldom even by the *abuse*, of the forceps, but are almost always the result of the delay recommended; that the rules given for its use are erroneous, unreasonable, and themselves the frequent cause of evil consequences. It may seem arrogant in me thus to speak. I may be deemed lacking in the respect and reverence due to these "eminent authorities," to thus question their teachings; but I claim that respecting matters of fact, facts of practical demonstration, and that come under observation as often as these, an experience of thirty years entitles me to form

an opinion for myself, and to conduct my practice conformably to that opinion.

It has been well said, "before a man writes a book he is just a common doctor, like the rest of us; but so soon as he deliberately writes his opinions in a book he becomes at once an *authority*, and his sayings are then, to many, as the voice of inspiration." Are our authorities always correct in their statements? Are they uniform in their teachings? Many pass their pupilage without seeing a case of midwifery. Let such a one be called to attend his first case of labor, what position will he naturally expect his patient to assume? He has read in his text-books, heard from his professors, "that it is the universal custom in this country and England for the woman to lie upon her left side, with her knees drawn up." Meigs, indeed, states "that the influence of this custom is so great, that a proposition to turn upon the back is frequently received with astonishment and aversion, as, at the least, indelicate!" Does this statement, uniformly made by all our authorities, accord with your experience? I ask you, gentlemen, do your patients usually assume this position? How many women have you ever delivered while lying upon their left side? Here is a statement in which all our authorities agree, and I leave you to answer as to its correctness.

To be Continued.

Editorial Department.

Periscope.

Copaiva in Sciatica.

Dr. H. C. Marsh writes to the London *Med. Times and Gazette*, of copaiva:—

I wish to speak of this drug as wonderfully efficacious in sciatica. The treatment of sciatica seems to be a little indefinite. I fancy we all meet with very troublesome instances in which we administer a variety of drugs with a perseverance that deserves, but does not always command, success. (After describing a most obstinate case he stated) at last I prescribed

℞.	Bals. copaib.,	℥iv
	Tr. lavand.,	℥iv
	Tr. hyos.,	℥iij
	Pot. bicarb.,	℥j
	Mucilag.,	℥j
	Aquæ,	℥vj. M.

A tablespoonful every four hours.

On the 26th the pain was almost gone, and she was radiant with smiles; but she rebuked me, with some show of reason, for not having given her this marvelous medicine at the outset.

I naturally looked upon this recovery as a mere coincidence—a happy chance; and the affair passed from my mind.

Nine months afterwards, on December 31, 1878, I was called in the night to see Mrs. J., who had been in bed for a week, with sciatica of left leg. The pain was so severe that I administered hypodermic morphia at once. She was a tall, thin, temperate—indeed, rather abstemious—woman, with perhaps a tendency to neuralgia. Her family are a little consumptive. I could not suspect her of the shadow of an intrigue. She had a grown-up family and a model husband; she was over fifty years of age. Her secretions were natural, and she seemed free from disease. I gave her the muriate of ammonia. On January 2 she was no better, and I prescribed full doses of bromide with colchicum, but refused her entreaty to repeat the morphia. No better on the 4th; so she then had belladonna and phosphorus. On the 7th, as the pain was growing more severe, she took syrup of the iodide of iron with phosphorus; and had a liniment of belladonna, aconite and veratria. On the 12th her sufferings were worse than ever. All the night through she had lifted up her voice and wept. The relatives gathered round me with upbraiding faces. One may manage a patient, even if she refuses to improve; but the patient's friends have one at a disadvantage. I was obliged to see her twice during the day, and each time considered it prudent to administer hypodermic morphia. On the 13th she was just the same, when—happy thought!—I suddenly remembered the former case, and prescribed the copaiva mixture. The next day the pain was nearly gone, and on the 20th she was quite well.

This time I did not forget; but have used the remedy lately in many cases, both male and female, with like success. I do not *begin* with the drug; thinking it better first to empty the bowels, and to relieve any gouty, rheumatic, or anæmic state that may happen to exist; but fall back upon it if the pain continues unabated.

In explanation of this therapeusis I have very little to say. Ricord remarked upon the action of copaiva on the nervous system, and noticed a case in which it produced temporary hemiplegia; and Maestri records an instance in which large doses of the balsam occasioned partial paralysis of the facial muscles.

For my own part, I am inclined to associate the remedial property just indicated with the drug's well-known power of producing diuresis in certain forms of hepatic dropsy. It seems to have an action on the liver; it certainly stimulates the kidneys; and it exercises some influence on the nervous system.

Slight Results from Serious Brain Injury.

In the *Canada Journal of Medical Science*, March, 1881, Dr. Daniel Clark, of Toronto, gives this curious case:—

About seventeen years ago I was called to visit a boy, aged thirteen, who had been kicked by a horse. A section of the skull was crushed in on the right side, near the median line, in the upper part of the frontal and parietal bones. One of the nine pieces fractured and detached from the surrounding bone had been driven into the substance of the brain, over an inch, in a perpendicular direction. The membranes were lacerated very much, and brain substance, within a few grains of an ounce in weight, protruded through the wound, much broken up, some of it hanging down upon his cheek. At the time I first saw him he was comatose. I extracted the bones, cut away the ragged edges of the membranes and the lacerated brain substance. Consciousness returned immediately. His temperature remained normal; his pulse did not rise at any time above ninety-six. He did not lose a night's sleep nor a meal after the evening of the accident. No febrile symptoms intervened. There was no paralysis, nor perversion of any of the organs of special sense. There was no difficulty in speaking. A large cavity remained. He afterward went to school to the same mistress as before, and she informed me that with the exception of a certain irritability of temper when thwarted (which he did not possess before), he was as intelligent as ever, and could learn his lessons with the usual aptitude. This was especially noticeable in mental arithmetical exercises. He was under my observation for several years after the accident. After he was aroused from his comatose condition, consequent on compression, his special senses were unimpaired, his locomotion and grasping power normal, and his bodily health good in every particular.

Salicin in Acute Rheumatism.

Prof. M. Charteris, M.D., of Glasgow University, writes to the *British Medical Journal*:—

Experimentally, I tried, four years ago, in two cases of equal gravity, salicylate of soda and salicin; and I found that the former produced decidedly alarming and toxic results, while the latter excited its harmless and beneficial influence. I was so much impressed at the time with what I witnessed, that I resolved never to give the artificial compound again in the disease, but to trust to the natural product, and in doing so I have been led to formulate the following conclusions:—

1. In uncomplicated cardiac cases, salicin in doses of twenty-five grains, dissolved in warm water or milk, will lower the temperature in forty-eight hours.

2. When this has been accomplished, diminish the frequency of the repetition of the dose mentioned to every six hours; and finally, after two days, stop it altogether, as its further continuance is useless and depressing, and retards convalescence.

3. If the temperature be not lowered in the time mentioned, in all probability the heart is affected; and if such should be the case, the medicine should be countermanded, for it will then in no way diminish the fever. The cardiac complication may not be detected by auscultation at the time; but it will invariably be found that a cardiac murmur exists at the natural termination of the disease. For this cardiac complication I apply a large blister over the region of the heart, and do not allow it to heal quickly.

4. Previously to employing salicin, I test the urine for albumen; and if this be detected, and if there be a suspicion of old-standing kidney disease, as revealed by the history of the patient, it is probable that the drug may not be properly eliminated from the system. That it is so, can be readily seen by testing the urine at intervals by tincture of perchloride of iron, when a purple color will be observed, owing to the action of the iron transformed in the system into salicylic acid. Should this reaction not be seen, it is well to discontinue the use of salicin.

5. Finally, I may state that I have never in any case found salicin to cause thirst or delirium. These phenomena may be attributed to impurities in the artificial compound—probably to carbolic acid. Salicin seems to me to have some special action in rheumatism, for it will be found not to lower the temperature in other affections where this is high. Thus, in a case of advanced phthisis, it is inert in large doses; while quinine, in similar circumstances, exerts its usual antipyretic virtues, when given at a different time to the same patient.

In a recent visit I made to some of the chief Continental hospitals, I found that the pure salicin was now alone employed, and, I may add, implicitly believed in, for acute rheumatism.

Spinal Irritation without Deformity Treated by Suspension, and the use of Plaster-of-Paris Bandage.

The following valuable paper, by A. A. Henderson, M.D., of Ottawa, appears in the *Canada Lancet*, March 11: I wish briefly to state to the profession the result of treatment of several severe cases of spinal irritation without deformity, cured by suspension and the application of plaster-of-Paris, after a thorough but unsuccessful trial had been made of the means usually adopted in the treatment of that severe complaint. I applied it for the first time, in this disease, on the 11th of March, 1878. After having for twenty-two months faithfully attended my patient, and during that period having repeatedly had consultation with professional friends, and used thoroughly every remedy which they or I could suggest, I applied a jacket, which gave immediate relief. Suspension was not only perfectly painless, but in addition, the pain caused by the disease ceased the instant the patient was raised by the suspender. As a result of this and subsequent cases, I feel satisfied that in suspension and plaster-of-Paris we have a means as certain to cure in spinal irritation without deformity, as in spinal curvature, and giving as perfect and immediate relief from pain. I have not used this treatment in mild cases, for they as a rule yield readily to

more convenient means, but whenever the case shows obstinacy I now advise suspension and a plaster jacket, with perfect confidence as to the result. I give the history of three of the most interesting of the cases I have treated in this manner. (We give the second only.)

CASE 2.—On May 10th, 1878, I was requested to visit Mrs. F. She told me that her health had been poor for several years, and for nearly four months she had been confined to her house, with symptoms which I found indicated spinal irritation of the dorsal region. No muscular spasms existed, and no deformity. I suspended her and applied the jacket in the usual manner. She stood the operation well, and was pleased with the change in her feelings. I ordered her to take abundance of fresh air and no medicine. Her health improved rapidly. I applied in all four jackets. On October 15th, 1879, I removed her last jacket, she being perfectly well.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

——Dr. Wm. Dickinson, of St. Louis, sends a reprint (from the *Alienist and Neurologist*), describing the mechanism of hemiopia, on the theory of total decussation of the optic nerve fibres in the tract at the chiasm. He formulates what he attempts to prove in the following four propositions:—

1st. Diseases involving the optic *tract* of *one* side will produce total blindness of the eye on the opposite side; and not bilateral hemiopia.

2d. Diseases affecting either lateral angle of the chiasma, involving both the optic nerve fibres entering and also those leaving it, will produce bilateral hemiopia; and not *nasal* hemiopia in *one* eye.

3d. Diseases affecting the posterior angle, in the median line, involving the optic nerve fibres of *both* tracts that enter the chiasma, will affect the outer half of each retina and produce *nasal* hemiopia; a form utterly inexplicable on the theory of partial decussation, and

4th. Disease in front of the commissure will affect the inner halves of each retina, and produce temporal hemiopia; the phenomena of which are alike explicable on either theory.

——The Report of the Indiana State Health Commission for 1880, Dr. Thad. M. Stevens, Secretary, is a pamphlet of fifty-one pages. Indiana has not got so far as the creation of a Board of Health, like Pennsylvania and some other States; it is not yet sufficiently civilized for that; but it has this "Health Commission," a body without any authority and with very little money. The Commission does all that it can do, which is not much. It advocates strongly a State Board of Health and Local Boards. The Secretary appeals urgently for this, as he says (p. 5):—

The entire profession of the State, without regard to isms, pathies or divisions, should be bound together in the work connected with vital and sanitary science. This can only be done by a law of the State, and such law must have bodies organized to act in the several precincts of the State, and not depend upon one to collect statistics, or complete investigation.

The present pamphlet contains a number of papers of unequal merit, on such subjects as "The Prevention of Disease," "Healthful Homes, or, the Hygiene of the Household," "Malaria," "Scarlet Fever," "Diphtheria," "Human Longevity," etc. The prevalence and the injury of concealing and lying about the prevalence of contagious diseases, are forcibly commented on by Dr. G. W. Burton, in the paper on Scarlet Fever. He writes:—

In many towns they have denied the existence of the disease when deaths were occurring daily from it. I am thoroughly convinced of the fact that if local boards of health, school trustees, and those in authority in the towns and cities of the State had done their whole duty by isolating the first cases, more than 80 per cent. of the children of the State now sleeping in the church yards would be living.

Such concealment is at all times and everywhere fraught, in the long run, with bad results.

——We have received the "Publishers' Register, of books sent for notice to leading Medical Journals," ruled for titles of books sent, and printed address of the Papers and Periodicals sent to. It is also well adapted as an Exchange List and Subscription Book, as a free list of all Medical Journals published in the United States, printed on gummed and perforated paper, accompanies each copy. Prices: 12 cap pages $1.00; 24 cap pages $1.50; 48 cap pages $2.00. Gummed and Perforated address of Publishers and Medical Journals, 50 cents, per 100 names. Howard Challen, Publisher, Philadelphia. Also for sale at this office.

BOOK NOTICES.

Transactions of the American Ophthalmological Society, Sixteenth Annual Meeting, Newport, 1880. Published by the Society in New York, and can be procured of the Secretary at No. 12 West 35th Street.

This number of the Transactions contains 174 pages, with twenty-three wood cuts, one phototype, and an interesting photograph of the fovea centralis of the retina, taken from a microscopical section. It is almost normal, except the plica centralis is absent, and this was probably owing, as stated by Dr. O. F. Wadsworth, in part, to the vitreous being so albuminous as to be solidified

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more convenient means, but whenever the case shows obstinacy I now advise suspension and a plaster jacket, with perfect confidence as to the result. I give the history of three of the most interesting of the cases I have treated in this manner. (We give the second only.)

CASE 2.—On May 10th, 1878, I was requested to visit Mrs. F. She told me that her health had been poor for several years, and for nearly four months she had been confined to her house, with symptoms which I found indicated spinal irritation of the dorsal region. No muscular spasms existed, and no deformity. I suspended her and applied the jacket in the usual manner. She stood the operation well, and was pleased with the change in her feelings. I ordered her to take abundance of fresh air and no medicine. Her health improved rapidly. I applied in all four jackets. On October 15th, 1879, I removed her last jacket, she being perfectly well.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

——Dr. Wm. Dickinson, of St. Louis, sends a reprint (from the *Alienist and Neurologist*), describing the mechanism of hemiopia, on the theory of total decussation of the optic nerve fibres in the tract at the chiasm. He formulates what he attempts to prove in the following four propositions:—

1st. Diseases involving the optic *tract* of *one* side will produce total blindness of the eye on the opposite side; and not bilateral hemiopia.

2d. Diseases affecting either lateral angle of the chiasma, involving both the optic nerve fibres entering and also those leaving it, will produce bilateral hemiopia; and not *nasal* hemiopia in *one* eye.

3d. Diseases affecting the posterior angle, in the median line, involving the optic nerve fibres of *both* tracts that enter the chiasma, will affect the outer half of each retina and produce *nasal* hemiopia; a form utterly inexplicable on the theory of partial decussation, and

4th. Disease in front of the commissure will affect the inner halves of each retina, and produce temporal hemiopia; the phenomena of which are alike explicable on either theory.

——The Report of the Indiana State Health Commission for 1880, Dr. Thad. M. Stevens, Secretary, is a pamphlet of fifty-one pages. Indiana has not got so far as the creation of a Board of Health, like Pennsylvania and some other States; it is not yet sufficiently civilized for that; but it has this "Health Commission," a body without any authority and with very little money. The Commission does all that it can do, which is not much. It advocates strongly a State Board of Health and Local Boards. The Secretary appeals urgently for this, as he says (p. 5):—

The entire profession of the State, without regard to isms, pathies or divisions, should be bound together in the work connected with vital and sanitary science. This can only be done by a law of the State, and such law must have bodies organized to act in the several precincts of the State, and not depend upon one to collect statistics, or complete investigation.

The present pamphlet contains a number of papers of unequal merit, on such subjects as "The Prevention of Disease," "Healthful Homes, or, the Hygiene of the Household," "Malaria," "Scarlet Fever," "Diphtheria," "Human Longevity," etc. The prevalence and the injury of concealing and lying about the prevalence of contagious diseases, are forcibly commented on by Dr. G. W. Burton, in the paper on Scarlet Fever. He writes:—

In many towns they have denied the existence of the disease when deaths were occurring daily from it. I am thoroughly convinced of the fact that if local boards of health, school trustees, and those in authority in the towns and cities of the State had done their whole duty by isolating the first cases, more than 80 per cent. of the children of the State now sleeping in the church yards would be living.

Such concealment is at all times and everywhere fraught, in the long run, with bad results.

——We have received the "Publishers' Register, of books sent for notice to leading Medical Journals," ruled for titles of books sent, and printed address of the Papers and Periodicals sent to. It is also well adapted as an Exchange List and Subscription Book, as a free list of all Medical Journals published in the United States, printed on gummed and perforated paper, accompanies each copy. Prices: 12 cap pages $1.00; 24 cap pages $1.50; 48 cap pages $2.00. Gummed and Perforated address of Publishers and Medical Journals, 50 cents, per 100 names. Howard Challen, Publisher, Philadelphia. Also for sale at this office.

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4. If the attempt should prove a complete failure, as a result of any accident, the deformity would remain virtually as at first.

In general, therefore, we have by it much to gain, and comparatively little to lose."

Article 5th, is an elaborate and carefully prepared paper on "Intraocular Lipæmia," by Dr. Albert G. Heyl, of Philadelphia; and 6th and 7th, "Tabular Report of Compound and Mixed Cases of Astigmatism," by Dr. W. S. Little. The Doctor also reports a case of "Traumatic Paralysis of the Superior Oblique Muscle," which is interesting, from the rarity of the muscle being affected. The improvement was chiefly due to the use of electricity. The Doctor also reported a case of Partial Paralysis of the Inferior Oblique treated by prisms. In two cases we have seen admirable results from a careful operation.

Cases seven and eight are reported by Dr. Henry D. Noyes, of New York. "Laceration of the Eyelids. Glioma of both Eyes, Removal, Recurrence, Death and Autopsy."

Report nine, is one of "Keratitis from Malarial Fever;" by Dr. Chas. J. Kipp, of Newark, N. J. As this is rather a rare affection to us, we give in full the details of symptoms and treatment.

"If the eye is examined shortly after the first symptoms of irritation are noticed by the patient, one or two or more slightly raised, irregular, opaque lines of varying length will be found on different parts of the surface of the cornea. At the same time some circumcorneal injection will be present. On the following day these opaque lines have increased somewhat in length, while at the same time the middle portion of the opacity has been transformed into a shallow ulcer. Under favorable circumstances no further increase in size takes place, the remaining opaque epithelium is thrown off, and reparation begins, to be completed only after several weeks. But not unfrequently the ulcer continues for days, and even weeks, to grow slowly in length, and at the same time sends out club-shaped, slightly raised, grayish offshoots from its sides. In some of my cases the ulcer crept across the entire cornea, and, in a few others, in which several ulcers appeared simultaneously on different parts of the cornea, nearly the whole epithelial layer was eventually destroyed. As a rule, the ulcer shows no tendency to increase much in depth, and its floor and edges, although always of a bluish gray tint, are rarely opaque. The middle and inner layers of the cornea generally remain transparent throughout, but in neglected or maltreated cases an extensive star-shaped opacity of a slightly yellowish-gray tint is sometimes developed in the inner layers of the central part of the cornea.

"Of the various local remedies which I have used in this affection, none have afforded greater relief than the pressure-bandage, warm fomentations, and the sulphate of atropia. In addition to the local treatment I have always prescribed quinia and iron in large doses, and during the last two years I have given arsenic, generally in the form of Fowler's solution, in medium doses, in many cases with very beneficial results. In cases where the pain was great I have never hesitated to give morphium in sufficient quantity to give relief."

Dr. Knapp reported a case of one-sided complete blindness, from Ischæmia Retinæ, ended in perfect recovery, by the use of iron and outdoor exercise in the country.

Dr. S. Buller, of Montreal, Canada, remarked to the Society, that he had used nitrite of amyl, and thought it was of advantage in ischæmia of the retina. Dr. Webster had obtained better results from the nitrite of potassium. Dr. Knapp then read his second paper, entitled, "Eight Cases of Sclerotomy for Glaucoma."

Dr. Williams, of Ohio, reports "Two Cases of Cyst of the Iris," and dwells on the importance of early removal by surgical operation; he gives a very good wood-cut of a microscopic section. These cysts frequently require a second operation, but if they are neglected they produce entire destruction of the eye. Dr. Agnew, of New York, has a valuable paper on "The Insufficiency of the Ophthalmoscope as the sole Test of Errors of Refraction.

"Hence, in many cases of asthenopia, the only safe way to study the refraction is to pursue the following method:—

1. To examine the eyes first with the ophthalmoscope, and at the moment record the result.
2. To make the glass-test next and record its result.
3. To bring both eyes fully under the influence of atropia.
4. To test the eyes with the ophthalmoscope again, the eyes being under the influence of atropia.
5. To make a second glass-test, the eyes being under the influence of atropia.
6. To test the eyes with the ophthalmoscope and glasses at the end of ten days or two weeks, or when they shall have recovered from the effects of the atropia."

Dr. Knapp remarked that the use of the ophthalmoscope was certainly not the only means of determining the refraction of the eye, but that it was probably the best. He wished to point out those conditions in which its use would lead to fallacious opinions:—

First.—He had committed errors when the relief of the fundus oculi was irregular. *Secondly*, in astigmatism. If we examined the minute blood-vessels—those, for instance, which passed from the disk directly toward the yellow spot, we obtained the refractive condition of a particular meridian only (the vertical, in the above example), and we could appreciate the proper

degree of ametropia only by the successive determination of the refraction of fine blood-vessels that showed different directions. The third fallacy was the influence of the ocular muscles upon refraction, particularly in convergent squint, in which, without artificial paralysis of accommodation, we could determine only the far point of the relative accommodation.

Dr. John Green, of St. Louis, reports a case of "Detached Retina," treated by hypodermic injections of muriate of pilocarpin. He injected eleven millig. of muriate of pilocarpin, dissolved in half a cubic centimeter of distilled water, beneath the skin of the right temple. Salivation began within two minutes, and became profuse within four minutes. Sweating began at about the same time as the salivation; it was quite decided four minutes, and profuse seven minutes from the time of the injection. The pulse rose in the first two minutes, from seventy-six to one hundred and eleven, from which maximum it gradually fell to one hundred in the course of half an hour, at which time the salivation and sweating had both sensibly diminished. At the end of an hour the salivation and sweating were over, but the pulse remained at about ninety. The saliva was strongly alkaline, and the quantity ejected during the hour measured one hundred and twenty c.c. No trace of myosis or of accommodative spasm could be detected at any time.

The injection of pilocarpin was repeated, as nearly as possible as before, and was followed by the same train of symptoms. The patient was kept in bed two days and the dark bandage was kept on three days.

We pass a number of papers in the above Transactions which are chiefly occupied by descriptions of new instruments, modifications of old ones, which, before they are brought before the general profession must be subjected to trials by experts: such as combination set of trial glasses, by Dr. John Green: the Keratometer, a new instrument for measuring the curvature of the cornea, by Dr. E. G. Loring, of New York; an Instrument for the Detection of Color Blindness, by Dr. Wm. Thomson, by arranging the test skeins on a stick, the colors arranged alternately, to match the test; a modification of Loring's Ophthalmoscope, by Dr. Henry D. Noyes, of New York; Dr. Green, an Improvement in Concave spectacle Glasses of high power.

Cases of acute attacks of glaucoma have been in several instances reported as the result of the improper use of Atropia; and at page 148, Dr. John Green reports a similar result from the use of Duboisia, and Dr. Knapp, with many other good ophthalmic surgeons, believe, and we should practice. that mydriatics should always be avoided when there is a disposition to glaucoma.

So many cases of cataract operations require a new pupil, from the filling up with false membrane, that the majority require opening, and sometimes these secondary operations are as serious and of as much importance as the first. Dr. Edward G. Loring has devised the following improved operation—which consists, not in a simple opening in the centre of the iris, but in a large, free, and transverse section of the iris and all underlying membranes. The method of arriving at this result is as follows: "any narrow knife, such as the ordinary cataract-knife of Graefe, may be used, though the narrow blade suggested by Liebreich is preferable. Better than either, however, I think, is the knife which I have had constructed for this purpose. This is simply an extremely narrow knife, with a very delicate cutting edge. The reason why the knife is made so narrow is, that it may be turned on itself in the wound, at right angles, if necessary, with the position it occupied in making the puncture."

Dr. Henry W. Williams, of Boston, gave a brief account of his experience with the new operation for enervation of the eyeball—Opticociliary Neurotomy. He prefers "operating from the inner side, with division of the internal rectus, which may afterward be re attached to the globe by means of a point of suture. The use of Warlomont's scissors, which crush the retinal and ciliary vessels in dividing them, prevents or lessens the copious hemorrhage, which may cause marked temporary exophthalmos, and thus give rise to pain from distention of the lids and the intra-orbital contents. Should this happen, it soon disappears under the use of cold compresses, as does also the ecchymosis of the lids which generally follows the operation."

Dr. Green gives the details of a Modification of the Operation of Burow, for Entropion, with four woodcuts. For the details we would refer our readers to the Transactions. The especial value of Dr. Green's method depends upon points of detail in which it differs from the older operations, viz.: the preservation of the vascular connection of the loosened lid-margin through the muscular layer, the narrowness of the excised strip of skin, the manner of applying the sutures, and the use of collodion to glue the eyelashes against the front of the eyelid, thereby taking advantage of the leverage of the cilia as an additional and efficient means of maintaining the lid-margin in its corrected position.

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THE LIMITATION OF BIRTHS.

A question has been revived in a late number of the *Michigan Medical News* which has a great deal of importance in America, and about which there is a strange diversity of opinion among specialists in the branch with which it is particularly concerned.

It is well known that families of American parentage on both sides are generally small; it is stated on the best authority that the native-born American element of our population increases in number less than the foreign or mixed element; and it is quite certain that this relative diminution does not arise from a loss of virility in the male nor from a lessened fecundity in the female, but from a definite determination on the part of both to limit the number of their children, which is accomplished by preventing conception.

The results of this practice concern the political economist, the moralist, and the physician, in so far as these scientists have charge of the welfare of the community, and it is from the standpoint of the last mentioned that we would contemplate the question of the propriety of this course. In fact, the verdict of the physician must ultimately control the opinions of the two former, as nothing is in the long run harmful, physically, but that its tendency is immoral and injurious to the State.

Yet, strange to say, the editor of the *Michigan Medical News* states his opinion, that "this question does not properly pertain to medicine." He must have read but little in recent gynecological treatises, to pen such a sentence. There was a whole volume some years since published, on "Conjugal Frauds;" ten years ago Dr. STORER wrote a great deal on this subject, both for professional and general readers; a very startling chapter on "conjugal onanism" is given by Dr. GOODELL, in his "Lessons in Gynecology," to which we shall have occasion particularly to refer; and the alleged evils of this practice have been a favorite theme with a large number of writers of addresses, chairmen of committees on diseases of women, and such like gentlemen.

It is, therefore, a medical question, in the first instance, and it is also a living question, a question of the day, that ought to be discussed and settled, as to whether such practices are physically injurious or not, and if they are, to what extent and under what conditions are they so. There is a great cowardice in the American profession in discussing all such subjects, as we have frequently pointed out in referring to the matter of controlling venereal diseases.

There are men who will say that even if these practices are not injurious, or are but slightly so, still it is better to give the public the opposite impression, for moral reasons. As if a lie ever did or ever could benefit morality! As if deceiving a person who asks and pays for an honest opinion from a professional man is a virtuous act and in the interests of public ethics! Away with such shuffling sophistry.

The question is simply one of fact, and should be settled by observation and unprejudiced generalization, just as any other. So far as studying these facts are concerned, we should be perfectly indifferent as to any other consideration except the getting at the truth of them. Any man who thinks the morals of himself or his community cannot stand the truth, had better kick such morals out of doors, and go in for truth instead.

Dr. Goodell is one of the latest and strongest advocates of the opinion that such practices—all practices apparently which aim to prevent conception—are physically hurtful; in some degree to the man, in a far greater degree to the woman. (See Lesson xxxiii, "The Sexual Relations as Causes of Uterine Disorders; Conjugal Onanism and Kindred Sins," in *Lessons in Gynecology*, 2d edition). He gives a formidable list of diseased conditions which he has found in married women who acknowledged to have employed various means to avoid children. That in nearly every case it was, or might well have been, a *post hoc*, instead of a *propter hoc*, does not seem to occur to him; but the earlier part of the chapter is marked by such a strong prejudice on the subject, drawn from personal theological views, that one ceases to be surprised that even such a distinguished scientific observer, such a generally most admirable reasoner, gives way to his prejudices when they are so fervid. Even the conservative English critics could not approve of this part of his work. In a long and generally very favorable review of his volume in the London *Medical Times and Gazette*, the reviewer writes:—

Perhaps the most novel feature of the book, and that in which it differs in the most striking manner from our English text-books, is the great importance which the author attaches to the abnormalities of the sexual act as causes of disease. Fibroids, polypi, ovarian cysts, fungous endometritis, prolapse of the ovaries, to say nothing of functional disturbances, are all put down to improper, or excessive, or deficient, venereal excitement. Not the slightest evidence is adduced here, nor, so far as we know, elsewhere, to demonstrate the connection. The fact that a number of Dr. Goodell's patients, who were suffering from the diseases in question, told him of irregularities of this kind, proves nothing, unless we could also find out how many people there were who exercised their sexual functions in the same unhealthy way and yet were not the subjects of any of these diseases. There is one class of women in whom the operation of these causes of ill-health may be reasonably supposed to be exceptionally frequent. If Dr. Goodell's doctrine be true, it is somewhat surprising that these diseases are not more common in prostitutes than they are. Either Parent Duchatelet was a most careless observer, or else his facts go far to negative the theories of our author.

The fact cannot be denied, and the author above referred to knows it better than most of us, that the main causes of the diseases of women—those diseases which are peculiar to their sex—are *pregnancy* and *parturition*. Probably ninety per cent., at least, of the cases which seek the aid of the gynecologist trace their maladies to these conditions, their complications or their sequelæ.*

Allowing, therefore, that certain means of preventing conception do have the results even which Dr. Goodell ascribes to them, would not

* The following extract is from an article on "The Uterine Function as a Cause of Disease," by Dr. P. V. Schenck, Surgeon to the St. Louis Female Hospital, in the St. Louis *Courier of Medicine*, February, 1881:—

"So intimately are gynecology and obstetrics connected, that a large proportion of female diseases take their origin in the lying-in room. Mismanaged labor is the cause of much of the gynecological practice. Uterine diseases, says Mundé, are, in the large majority of instances, the direct result of parturition. Thomas, in confirmation of this, remarks that if we go back to the commencement of all cases of uterine disease, a very large proportion will be found to date from parturition."

Add to this "large proportion" the accidents and complications of pregnancy, abortion and miscarriage, and ninety per cent. is probably not too high a figure.

pregnancy and parturition, if allowed to proceed in these same cases, have induced yet more numerous and troublesome maladies? Unquestionably so. Therefore, even on his own grounds, looking at the physician's duty to be, in the first instance, the physical well being of his patients, would it not be rather to state this fact than to convey the impression that the reverse is true?

We are well aware that in certain individual cases pregnancy is a curative measure for uterine difficulties; but we speak of the average, and what is true of the majority.

But in the *Medical News*, Dr. O. E. HERRICK, a gynecologist of repute, goes further. He says there are means of preventing conception which are absolutely harmless to the woman, and, to quote his vigorous colloquialism, "all this mawkish sentiment about its being wrong, or about its doing damage to the health, is simply bosh."

This, too, is the opinion of the French gynecologists, in whose country the limitation of families is carried to a system. No such results are mentioned in their treatises as the American author quoted has imagined he has found. There are means familiar to all physicians any hurtfulness in which would seem difficult to understand. There are others which no doubt are injurious, if repeated for a long time. It would seem, therefore, that if any advice is given on this subject—if any pay is accepted for a professional opinion upon it—the truth ought to be told to the inquirer, as near as we know it. At any rate, it is an assured conviction with us, that one might as well expect to gather figs from thistles as to operate for a moral effect by conveying impressions contrary to our own convictions of the truth.

As to the effect of a general adoption of means of limiting families in society at large, the best authorities differ *tôto cælo*. The one school of writers, those who believe, with Malthus, that unless there are preventive checks the population will soon outgrow the food supply, point to many instances where such is actually the case. The other side explains these examples by various suggestions of how easily they might have been prevented.

The French statisticians generally bewail the small size of families in their country; yet it is well known that France, in spite of her losses, is a richer country than Germany, and her lower classes are better off than the lower classes in England.

The *République Française* has lately published a series of elaborate statistics, which show, conclusively, that the population of France has been steadily on the decline for the last two hundred years—a state of things which it thinks deplorable. It considers that the rapid increase of population is not only an element of military strength, productive power, and intellectual superiority, but points out that one of the consequences of this waning population is dearth of labor. France has to import, at considerable expense, laborers from Belgium and Italy, for agricultural and industrial purposes. The cause of the evil, it asserts, is to be found in the fact that French marriages are unfruitful, and it is a serious danger for the political and military power of the country.

It is needless to add, that the British school are generally opposed to limited families, just as they are to any restrictions on the indulgences of the appetites:—

"To urge," says Professor Bain, "that there is sufficient poverty and toil in the world without bringing in more to share it than can be provided for, implies either begging the question at issue—a direct imputation that the world is at present very badly managed—or that all persons should take it upon themselves to say how much poverty and toil will exist in any part of the world in the future, or limit the productiveness of any race, because inadequate means of feeding, clothing, or employing them may be adopted in that part of time sometimes called unborn eternity. As a rule, the result usually has been, limit the increase of population without adequate cause, and the reaction causes deterioration or annihilation."

To this, it is answered, that confessedly the world *is* very badly managed, and the most man can do is to make it barely tolerable for the greater number; secondly, that in declining to beget, to the utmost of his power, a man or woman does not and need not consider the whole

world, but his own circumstances; and thirdly, that the deterioration and annihilation referred to is a mere rhetorical picture, no such thing appearing anywhere in history.

But this pure political side of the question may be left to other places for discussion. Enough to say, that it is an open question, not to be shut off by bold assertion.

Notes and Comments.

On a Question of the Day.

Our readers should take an interest in the effort which is making in this and other cities to oppose trade-marks and copyrights in manufacturing pharmacy. The question arises in the main from a belief that the public are often defrauded and the emoluments of the profession diminished by these legal protections to specialties.

Whether this is the case to a marked extent, and whether, on the whole, the disadvantages to the profession and the public overbalance the advantages, are the points at issue; and they are not yet decided.

Two years ago (Reporter, March 8, 1879, p. 216) we quoted, approvingly, the opinion of Dr. Mott, of New York, that trade-marks are "the best protection the public can have." We argued that, if properly guarded by statutes against abuse, copyrights and trade-marks in pharmaceuticals, and patents in surgical instruments, are just as advantageous to the public and the profession as to the manufacturer; and from this opinion we have as yet seen no sufficient reason to depart.

Turpentine in Psoriasis.

At a meeting of the Medical Society of London, Dr. Radcliffe Crocker showed a case of general psoriasis, illustrating the comparative result of treatment by turpentine and chrysophanic acid. The patient, a man aged forty-six, had never been entirely free from the disease for fourteen years; a soft cancer ten years before was not followed by constitutional disease, and the psoriasis presented the usual typical character of the now specific eruption. The disease was worse in winter; the last attack began in November last. With the exception of the lower part of the face and scalp, the middle of the back between the crest of the ilium and the line of the angles of the scapulæ, and the backs of the thighs, the eruption was so closely distributed that there was scarcely any interval of healthy skin; over the knees and elbows the patches were larger. The treatment adopted was, first swathing him in bandages soaked in oil for four days, to remove the scales; the left half of the body was then rubbed with half a drachm of chrysophanic acid to one ounce of lard, while the right half was rubbed with two drachms of oil of turpentine to one ounce of olive oil. The strength of each preparation was increased every few days, until pure turpentine was applied on the right side, and chrysophanic acid, one drachm to the ounce, was used to the left; and in twelve days from the time this strength was reached the whole eruption on both sides had disappeared, with the exception of a few spots on the shoulder. As far as rapidity of action was concerned there did not seem any advantage of one application over the other; there was a little tingling with the turpentine, while the chrysophanic acid produced staining of the clothes and skin.

The Cause of Nephritis after Diphtheria.

The nature and mode of production of diphtheritic nephritis is the subject of a recent communication by M. E. Gaucher to the Société de Biologie of Paris. It may be expected that the lesion would be due to the same mechanism as that which produces the similar changes which have been found in some other infectious diseases. In the nephritis which sometimes occurs in typhoid fever, for instance, there is a granular infiltration of the epithelial cells and an obstruction of the lumen of the tubules of diffused material or globular masses. These alterations have lately been ascribed by Bouchard to the infiltration of the kidney by bacteria. In a case of diphtheria which Dr. Gaucher had an opportunity to examine similar bacteria were found in the blood and kidneys. From these facts he concludes that diphtheritic nephritis is of parasitic origin, and that the albuminuria is the result of the passage of the bacteria of the blood through the kidneys. The albuminuria is thus to be regarded as an effort at the elimination of the poison.

Statistics and Treatment of Ophthalmia Neonatorum.

At a meeting of the Manchester (England) Medical Society, Dr. Emrys-Jones gave the details of 420 cases presented for treatment at the Royal Eye Hospital, a large proportion of which had been under previous treatment. In 72, or nearly 18 per cent., the cornea was affected; in 38, both corneæ were affected; in 34, one cornea was affected; in 16, both eyes were lost; in 21,

one eye was lost; making a total of 53 eyes lost, or nearly 6¼ per cent. In 26 cases there were ulcers of the cornea; in 14 cases there was perforation, 6 with prolapse of the iris; in 16, there were large opacities; in 5, there were ulcers with lead deposits; in 4, there were ulcers with deposits of nitrate of silver. Dr. Emrys-Jones stated that he had never seen a single case of uncomplicated ophthalmia neonatorum lost where proper treatment was adopted early. He further pointed out that, after inquiry into the cause of blindness, in 72 cases examined for admission to Henshaw's Blind Asylum, 24 of them were found to be due to this disease in infancy, and that 75 per cent. of all the blindness in this large asylum were due to preventable causes. After referring to Dr. de Wecker's method of treatment with 2 per cent. solution of carbolic acid, he detailed the method he found most efficacious, viz: brushing the palpebral conjunctiva over with weak solutions of nitrate of silver, 10, 15, or 20 grains to the ounce of water, by means of a camel's-hair brush, and washing off the superabundant nitrate with a solution of salt and water.

Special Reports.

NO. VIII—SURGICAL MECHANICS.

The ingenuity of American inventors is justly famous, and American surgeons are by no means the last in this department. Owing to some disappointments with cuts the present is only a preliminary report in this important branch.

Artery Forceps and Needle Forceps.

Dr. J. S. Wight, of Brooklyn, has laid before the profession, in the Proceedings of the Kings County Medical Society, two ingenious forceps. He writes:—

I invented the *artery forceps* in 1872, for the purpose of taking hold of meningeal arteries when required during resection of the cranial bones. The curve in this instrument is adapted to this work, in which I have used it several times. The length of the instrument is four and three-fourths inches. The jaws are curved, and have a length of about an inch and a half. The jaws are perforated near the ends, so as to introduce a ligature for arteries or tumors. I use this instrument constantly, to arrest hemorrhage during operations, especially during operations on the head. When the operation is done the artery forceps is removed, and generally the hemorrhage does not recur. I have used it in ligating arteries in the continuity, and in ligating arteries during all kinds of amputations. The curve of the instrument will seize a considerable extent of bleeding surface and arrest the flow of blood. This pair of forceps I consider a valuable adjunct to the ordinary artery forceps. It has a spring catch and a pivotal pin, which has enabled me to use it as a handle to the chain-saw, so that I have dispensed with the usual handles.

I invented the *needle forceps* in 1873, as none of the needle forceps in use exactly suited me. This instrument is about five inches in length, having straight jaws about an inch and a half in length. On the inside of the handle rings it has a catch, that can be easily operated with one hand. The arms of the handles are somewhat elastic, but yet enable the jaws to grasp the needle firmly. I have pushed a pin through a half inch pine board with this instrument. I have used the needle forceps for the avulsion of ingrowing nails and removing pieces of necrosed bone. One of the most important uses of this instrument is the arrest of hemorrhage. In 1874 I suggested the use of the needle forceps for the arrest of bleeding from the axilla, in a case of my

Fig. 1.

Fig. 2.

colleague, Dr. Skene. The Doctor was removing a large tumor from the breast and axilla, and had a gush of blood from the axilla, with extreme difficulty of ligation. My needle forceps were applied to the bleeding vessels, and left in place for thirty hours, and then removed, when bleeding did not recur. The Doctor tells me he has often repeated this experiment. Since that time I have used the needle forceps for hemostasis. I have also used the needle forceps for crushing the ends of arteries of the scalp, in case of failure of other means. I have used this instrument for crushing the veins in some cases of piles, and had a most desirable result follow.

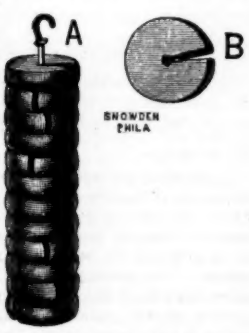
These instruments are made by Tiemann & Co., 67 Chatham St., New York. Fig. 1 represents the artery forceps. Fig. 2 represents the needle forceps and hemostat. I would long ago have published descriptions of these instruments, but have waited till experience has fully demonstrated their uses, some of which I have pointed

out. They will shorten operations and prevent loss of blood, and thus be the means of saving life.

Extension Apparatus for Fractures, etc., of the Bones of the Leg.

In the treatment of fractures of the tibia and fibula, coxalgia, etc., there was not, till recent years, any form of apparatus employed by which an equable, and at the same time a *reasonable*, amount of extension could be exerted. In our hospitals and private practice, reliance was placed upon bricks, weights, or, in fact, anything that came most readily to hand, and that could be made to do duty as an extending force. The subject of the measurement of the amount of extension in cases of fracture is to the practitioner a very important one in these days, when every case of fracture treatment undertaken has standing back of it the threat of a suit for malpractice; for in the event of such a suit, the question may be presented, as to what amount of extension was placed upon the limb; that could not be very satisfactorily answered by the reply "two or three bricks," the weight of which bricks is a mere matter of guess and approximation. Some years since Dr. Levis, of this city, prepared a form of apparatus that has enjoyed a very high degree of favor in the treatment of leg fractures. This consists of two portions, a rope and pulley, by which weights are suspended, and a cage, or iron bar, to support the weights. As originally constructed, the apparatus may thus be described. An upright iron rod supports a pulley, over which plays an extension cord; the prongs of the fork-like portion of the bar in which the pulley plays should fit close to the wheel, and project an inch to an inch and a half above the top of the wheel, in order that the extension cord may not be readily thrown out of place by those passing in close proximity to the bed; in fact, we rather think if there was a top piece connecting the two upper ends of the fork in which the pulley plays, that it would improve the apparatus by preventing any possible dislodgment of the cord. To hold the upright bar in position an adjustable clamp is employed, by which the rod and pulley can be adjusted to any required height, while at the same time the clamp will grasp a bar of any width at the foot of the bedstead, or, in fact, it may be attached to any body that will afford sufficient security and steadiness; this clamp may be reversed, so as to grasp an under surface as readily and strongly as an upper. The amount of weight extension is effected by a series of one pound weights, through the centre of each of which is drilled a hole, these weights sliding on a rod bent into the form of a hook at the top, for catching in a loop in the extending cord, or they may rest in a cage, composed of four upright iron bars, from which they may readily be removed by tilting them on their edges.

As originally constructed, this apparatus presented with all its advantages one disadvantage, namely, that to decrease or increase the amount of extension it was necessary to remove the weights from the extending cord and to slide them up or down over the bent extremity of the bar; further, if the weights were so slotted as to be placed on the bar without passing over the hook, then they were liable to be thrown off if accidentally struck; in the same way a blow on the cage form of the apparatus might result in the tipping up and rolling out of the weights, which, as can readily be seen, is not a desirable consummation. Taking these things into consideration, the apparatus has been somewhat modified recently, by Mr. Snowden, an instrument maker of this city. This modification consists in flattening and narrowing the diameter of the upper inch and a half or two inches of the bar upon which the weights are suspended, the remainder of the bar maintaining a uniform diameter. In the centre of the weights a hole is then drilled, into which the rounded portion of the bar fits very tightly, and from which centre hole a slot is cut (B) that, while it permits the passage of the bar in the upper constricted and flattened portion, is too narrow to allow of the weights slipping off the bar, no matter in what direction or with what force a blow may be struck or the apparatus displaced. The amount of extension, which, during the first few days, in the treatment of fractures in muscular adults, should be about twelve pounds, can thus be readily diminished to eight pounds or less: the body being employed as the counter-extending force, a perineal band being employed if necessary, the foot of the bed, of course, being somewhat elevated.



The cardinal principles of an extending apparatus are, we think, thus obtained, namely, convenience in form and inexpensiveness, portability, ready and convenient adjustability to

various forms of bedsteads, and an accurate measurement of the amount of extension exerted and ease of readily varying the amount of extension. The measurements of the apparatus are as follows: greatest length of perpendicular bar from tip to tip, 23 inches; transverse measurement, ⅜ inch; size of wheel, 2½ inches; length of clamp over top, 3½ inches; length of binding screw. 4½ inches; length and width of clamp tongue, 4×1¼ inches; weight, 14 pounds; extreme length of rod for weights, 11½ inches.

Combination of Stem Pessary and Abdominal Belt.

The improvements in gynecological surgery are as numerous as in any other branch, if not more so. The present cut illustrates one of Staufer's series of improvements. The hip straps are elastic, being of the material known as "satteen," which is a woven tissue of fine quality and durable. The stem cup is of hard rubber, and through its base the soft-gum attachments *s s s s* pass, fastening it to the belt. This allows adjustment so that the stem can be made to meet the axis of the vagina. The rigidity which has been objected to stem pessaries fastened on an inflexible metal rod, is happily overcome by this contrivance.

CORRESPONDENCE.

A Visit to the New State Insane Hospital, near Norristown, Pennsylvania.

ED. MED. AND SURG. REPORTER:—

Pennsylvania, the keystone of the federal arch, has been justly celebrated as one of the chief cultivators of the arts of peace and good will to all mankind; her coal, oil and iron, have built up the commercial prosperity, not only of the State, but of the whole Union. In all the benevolent and philanthropic efforts to improve, ameliorate and benefit mankind, she has been always in the front rank. This State has been also careful of the poor, the blind, halt, and the lame; as well as the deaf, dumb, and insane. This latter class makes the strongest and most urgent appeals to the sympathies and benevolence of her people, and she has not been lukewarm in providing for their wants.

The first State Lunatic Hospital was established at Harrisburg, in 1851; but in spite of all the care and attention given to its administration, it was not sufficient to accommodate the increasing number of patients that were constantly applying for aid, nor was there sufficient space to properly classify those that were received, to give the best opportunities for cure.

The Western Pennsylvania Hospital, at Dixmont, near Pittsburg, was opened in 1856. This is a general hospital, and like that at Philadelphia, has also a department for the insane.

The second State Hospital for the Insane was, therefore, built and opened November 1st, 1872, at Danville, with a total capacity of seven hundred. In the above Institution there is a board of trustees, who meet once a month, or oftener, but the physician is the chief executive officer, not only attending to his own special duties, but also all the others. Again it was found that the capacity of this hospital was not sufficient for all the demands, and the insane department of the Philadelphia hospital was so crowded that it became unfitted for the proper treatment, so that the present hospital for the Southeastern District of the State had to be built. It has been in operation one year in September, and the number of patients in the hospital is six hundred and ninety-four, its full capacity being seven hundred. Part of the patients now in the wards had to be removed from the hospital at Danville, owing to a recent fire that destroyed one half of that building. The hospitals at Harrisburg, Danville, and Philadelphia are all under the old system of a moderate amount of restraint, the chief physician being a male.

This new hospital, near Norristown, is under the system borrowed from those of Belgium—small, separate buildings, with no restraint but the watchful care of the nurse or attendant; all the patients are free, inasmuch as no sort of wristlets, strait jackets, muffs, etc., are used; and even the very noisiest and most excitable patients were, with one exception, allowed to walk about during our visit. On careful inquiry about this class—some of whom are very destructive, and some have a suicidal tendency—we were told that the day previous one of the men was about to attack Dr. Cass; he had his coat off, and the Doctor, looking him in the eye, inquired about the weather, and so the patient's attention was diverted. Another case, in which Miss Alice Bennett, the physician who has entire charge of the female patients, with an assistant, Miss Anna P. Kugler, were going through the ward, a violent woman sprang at the former, and would have hurt her, had not the attendant caught her and placing her arms round her passed her into her room and locked the door.

Sufficient time has not elapsed to be able to judge of the working of this free system and the division of labor of male and female departments, and we prefer to give a few extracts from the joint reports of the two chief physicians. When the report was made, Oct. 1st, 1880, the whole number of patients was 544—241 males and 303 females, native born and foreign. The chief alleged physical cause of insanity in the males was intemperance, and the chief moral cause, domestic trouble. The chief form of insanity was chronic mania, of which there were 111 cases; then followed dementia, 113. There were 14 who had a homicidal disposition. The mortality from July 12th, 1880, to September 30th, 1880, seven cases. Discharged from institution, two recovered and one improved. During the month of August there was admitted into the men's ward of this hospital the almost

unprecedented number of 227 patients, ranging from the mildest to the most active and dangerous types of insanity. Not a single accident occurred. Of this number, 125 were from the Insane Department of the Philadelphia Hospital. Subsequently, 140 more were received, making the whole number of patients Philadelphia has supplied and is paying for, 265, which makes the hospital, although somewhat removed beyond the city limits, practically a Philadelphia institution.

The institution is constructed on the plan of detached wards and supply buildings, with connecting corridors—the first two male ward buildings are parallel to each other, on the linear plan, the second one receding in the usual manner, except that it is entirely detached from the first; the third building is situated at right angles to the others, and the fourth or refractory ward building is built upon lines running parallel to the first. The hospital faces the southeast side, which gives a plentiful amount of sunshine in the wards both morning and afternoon. The buildings for patients are two stories in height, and within are light and cheerful in every part. The number of wards are sufficient (sixteen for males) to admit of a very thorough classification of the different grades and types. The institution has most of the modern improvements in hospital appliances, both in and out of the wards, and many minor devices and conveniences which are peculiar to itself.

Dr. Cass writes: "One of the older Asylum Superintendents once remarked that the most important consideration in the care and treatment of insane patients in hospitals is the provision for the violent class. While this institution will rank favorably in most respects with any, it is in the wards intended for the untrustworthy that the most admirable adoption exists.

"The term moral treatment is used to designate all of the restorative means that are employed in the treatment of the insane aside from medical agents, and in this division occupation and amusement are the main resources.

"Employment prudently selected and conducted is especially regarded as an important curative means in insanity. As such, it will be turned to account. Already there are employed in various ways about the hospital nearly one-third of the whole number of male patients, and this force will be increased judiciously from time to time."

In the female department, the report of Dr. Alice Bennett states:—

"In this period of two months and nineteen days 201 patients were admitted. Four patients have been discharged recovered; all were inmates of the hospital for less than two months; the whole duration of the disease, in three cases, did not exceed three months; one had been an inmate of another hospital for eight months, and for her change of scene seemed to work a benefit as sudden as it was gratifying. Six deaths have occurred. Realizing the value of the 'moral treatment' of mental disease, realizing, also, that this consists more in the every day—and every hour—influences brought to bear upon each mind than in any special devices for their occasional diversion or entertainment, however important these may be as aids, it has been the aim of the Trustees and medical officers to secure a high order of service in the wards, and in this they believe they have been, in some measure, successful. It is aimed to make each ward a home, whose influences shall be elevating, and where justice and kindness to all are assured. Work is encouraged as a sovereign remedy. Various means of occupying and interesting patients, to be found in the older institutions, are lacking, but with sewing, plain and ornamental, reading, which has been supplied in limited quantity by a few friends, the general work of the ward, with occasional days at the laundry and kitchen, the time has not seemed to hang heavily, and a general spirit of contentment has pervaded the wards."

"In the treatment of the excited class, mechanical restraint has been used in a few cases only, and is now, practically, in disuse. Several 'violent' cases, brought from other institutions under some form of restraint that had become habitual from months of use, have been released at once upon their admission, with most satisfactory results.

"Nothing is more certain than that mechanical restraint is incompatible with 'moral treatment,' and that resort to it destroys at once any personal influence that might otherwise be brought to bear. Whether a confession of fear on the part of the attendant, or a substitute for the latter's vigilance, it can hardly fail to lessen the bond of respect between patient and attendant, which it is *essential* to preserve. The patient is humiliated by her chains, and often the most vicious propensities are aroused. For example: Among the cases referred to was a woman whose hands had been confined by 'the muff' for six months continuously. As a consequence she had learned to use her feet with a force and accuracy of aim that made them far more effective weapons of offence than her hands could be, and by the simple release of the latter she was at once a less dangerous companion for other patients. By judicious firmness on the part of attendants, who must know no fear, never get in a passion, but treat the patient with uniform kindness, and, above all, with uniform justice, patients like the one described may be brought under control as much more complete and efficacious than mere mechanical restraint, as it is higher and more desirable. Too much cannot be expected. Untrained, savage natures, which have never known self-control, will not at once respond to the higher stimulus. These require the utmost vigilance and the utmost patience, but surely each of the lowest and apparently most hopeless of these unfortunates may claim our best endeavor.

"I would not be understood as placing myself among the radical advocates of non-restraint. In some rare cases restraint may be justifiable as a protective measure; I have even heard it said that it is sometimes remedial; but is not the good it *may* do so surely modified by the evil it *must* do as to lead all thoughtful persons to pause and carefully balance the two before resorting to it?"

The Hospital building No. 1 of the original plan, intended for violent female patients, was

not erected, by reason of a lack of funds. Consequently, another building, not adapted to the treatment of this class of patients, is now being used for that purpose. The natural increase of patients has filled the female wards, and it is therefore essential that the No. 1 building be erected during the coming season. There are many other improvements needed to complete the plan devised for this Institution, for all of which the following estimate is made:—

No. 1 building, corridor, etc	$95.000
Grading, drainage and roads	10,000
Fencing	7,500
Exercising yards	3,000
Ice house, dam and slaughter house	4.500
Coal bin and track	1.500
Barn and root house	5,000
Porter's lodge and entrance gate	5,000
Screens for windows	1,500
Covering for corridors	20,000
	$153,000

An appropriation of $20,000 will be needed for additional furniture and equipment, and $5000 for farming stock and utensils.

The Legislature has been asked to appropriate $150,000 for this purpose. Several members opposed the appropriation, on the ground that it was not absolutely necessary, and to convince them to the contrary, an invitation was extended to them and others, by the trustees, to visit the Institution, on Saturday, March 19th, and make a most careful and thorough examination of the whole building, which they did, and from the tone of their remarks we were entirely satisfied that they would make the appropriation. The Institution is under an admirable non-partisan set of trustees, many of them devoting much of their valuable time and talents to it, and we feel that it will ultimately prove a great boon to the class of society for which it was built. Several well known medical gentlemen are connected with it, and the following were in attendance, in spite of a pouring rain: Dr. John Atlee, of Lancaster, who made an admirable speech, Dr. Arnholt, of Pittsburg, and Drs. Diller Luther, Laurence Turnbull, N. L. Hatfield and Weist of Philadelphia, Dr. Kern, of Bath, and Dr. Martin, the able Secretary, of Allentown.

Much kindness and courtesy was received by your reporter, and he desires to express his thanks to the President, General Hartranft, and Treasurer, B. K. Jamison. Esq., also the Chairman of the Executive Committee, W. D. H. Serrill, Esq., of Darby, and other members of the Board of Trustees. L. T.

News and Miscellany.

Medical Society of the State of Pennsylvania.

The Thirty-second Annual Meeting will be held in the city of Lancaster, on Wednesday, Thursday, and Friday, May 11th, 12th, 13th, 1881, commencing on Wednesday, May 11th, at 9 A.M.

Appointments for 1881.—To make the address in Medicine, Dr. J. Solis Cohen, Philadelphia. Surgery, Dr. S. M. Ross, Altoona. Obstetrics, Dr. S. T. Davis, Lancaster. Hygiene, Dr. Benjamin Lee, Philadelphia. Mental Disorders, Dr. S. S. Schultz, Danville.

Committees.— On Epilepsy and Insanity, Dr. John Curwen, Harrisburg. On State Board of Health, Dr. Wm. B. Atkinson, Philadelphia. On Medical Legislation, Dr. R. L. Sibbett, Carlisle.

Amendments to be acted on.—By Dr. W. W. Dale—Constitution, Article V, Section 5. Add: "Which action shall be final; provided, however, that either party may appeal to the President of the State Society, who may direct the Censors of an adjoining district to hear and determine the case, and to report their action to the Society, which shall be final."

By Dr. C. A. Rahter—Article IV, Section 1. After the word Treasurer, add: "Judicial Council."

Also, By-Laws, Article 1, substitute for Section 10: "A Council, consisting of nine members, shall be elected, whose duty it shall be to take cognizance of and decide all questions of an ethical or judicial character that may arise in connection with the Society. Of the nine members of the Council first elected, the three first named on the list shall hold office one year, and the second three named shall hold office for two years. With these exceptions the term of office of members of the Councils shall be three years, three being elected annually.

"The said Council shall organize by choosing a President and Secretary, and shall keep a permanent record of its proceedings. The decisions of said Council, on all matters referred to it by the Society, shall be final, and shall be reported to the Society at the earliest practicable moment. All questions of a personal character, including complaints and protests, and all questions on credentials, shall be referred at once, after the report of the Committee of Arrangements, or other presentation, to the Judical Council, and without discussion."

By Dr. J. T. Carpenter—Article III, Section 2. "The delegates shall receive their appointments from the County Societies, and from the College of Physicians of Philadelphia."

Resolution adopted at Session of 1880.—That no delegates from a County Medical Society be allowed to take seats at the session of next year unless they bring evidence of having complied with the law requiring the appointment of Medical examiners. *Vide* Transactions, 1880, p. 21; Transactions, 1878, p. 23.

☞ Secretaries of County Medical Societies are earnestly requested to forward *at once* complete lists of their *Officers and Members*, giving the *post-office address of each.*

Every *delegate*, before admission, shall produce a certificate of delegation, signed by the President or Secretary of his County Society.

Every *permanent member* (*not a delegate*), before admission, shall produce a certificate of good standing in his County Society.—(*Extract from Constitution.*) Wm. B. Atkinson, M.D.,
Permanent Secretary.

—Cerebro-spinal meningitis of a grave type has prevailed in the Mississippi and Ohio Valleys the last few months. In Southern Indiana it has been almost epidemic.

International Medical Congress, London, 1881.

Preparations for the approaching International Medical Congress are being vigorously pushed forward by the Executive Committee, and the arrangements are now beginning to take a more definite form.

The inaugural address, by Sir James Paget, the President-elect of the Congress, will be given in St. James' Great Hall, which has been already engaged for the purpose, on Wednesday morning, August 3d.

The following mornings will be devoted to the business of the various sections, while the afternoons (with the exception of Saturday afternoon, which will be left free for garden parties, excursions, etc.) will be occupied by the general meetings of the Congress, at which four addresses will be given by distinguished men of four nationalities. Three gentlemen have already promised to give these addresses: Prof. Huxley, probably on "The Connection of General Science and Medicine;" Prof. Volkmann, of Halle, on "Modern Surgery;" and Dr. Billings, of Washington, on "Medical Literature." The fourth address, to be given by a distinguished Frenchman, has not as yet been finally arranged.

The meetings of the varions sections will be held in rooms at Burlington House, courteously placed at the disposal of the Committee by the University of London, the various learned societies and the Royal Academy of Arts. This, however, not providing the required amount of accommodation, the Committee have engaged Willis' Rooms for the occasion, and four of the sections will hold their meetings there.

As stated in an earlier notice, no less than 40,000 individual medical men in various parts of the world received the original circular of invitation during August and September of last year, and since then the secretaries of the various sections have been actively engaged in circulating provisional lists of subjects, which seemed, in the opinion of the committees of the sections, those best suited for discussion and papers. Numerous replies have been received in answer to these communications, in some cases leading to alterations in the subjects selected. These amended programmes have again been distributed among those most likely to take interest in them, and are now combined into a pamphlet and are issued, together with the rules of the Congress, printed in the three official languages, to any medical man making application for them to the Secretary General.

Since the list of names published in November last, a large number of our foreign colleagues have definitely announced that they will come to the meeting, and there seems every prospect of the attendance from abroad being a full one. Meanwhile, depending on the number of names appearing as officially connected with the Congress, and on the subscription list, together with the number of gentlemen from abroad who have positively stated their intention to attend, a certain estimate of 1000 members may be made, and it seems not unreasonable to assume that at least double that number will attend.

The Reception Committee are busily engaged, and have decided upon giving an evening Reception at South Kensington, and perhaps a second in the Albert Hall.

The Lord Mayor purposes entertaining members of the Congress at dinner at the Mansion House, on August 4th.

The Sanitary State of New York City,

A remarkable statement concerning the actual and prospective healthfulness of New York City was made by Professor A. L. Loomis, at a meeting of the New York Academy of Medicine, March 18th. As the sanitary character of that metropolis is a subject of general interest, we reproduce a portion of it. Dr. Loomis said: It is hardly necessary for me to remind the members of this Academy that during the past few months all diseases, acute as well as chronic, assumed an unusually malignant type. By reference to our death-rate, we find that during those months it has been higher in New York City than ever before during the corresponding months of the year. The disease which is to be before us for discussion—pneumonia—has prevailed more and more fatally than ever before since I have been a member of the profession. There have been fevers which cannot be classified—new in many respects—prevailing among us. Phthisical patients have passed away in ways to which we were not accustomed, and when persons in the declining years of life have been seized with acute diseases, every physician must have trembled at the results. There has been a peculiarity, a fatality, in the types of disease which must have struck every practitioner as unusual. As guardians of the public health, it seems to me that we are very naturally led to inquire what are the circumstances and what the conditions which have brought this condition of things about. Has disease changed its character, or has there been a weight upon the city which it never felt before? As suggestions to answers, I would make the three following propositions, not with the idea that they will answer all the indications or account for all the conditions: First, we should remember that the city of New York is in a malarial district, and its inhabitants, on that account, are predisposed to disease; secondly, we all know that our sewerage system is notoriously bad and deficient, and we also know that there are emanations from the sewers which are deadly in their nature, and that when these shall be thrown into our homes and streets by defective sewerage, we have another element added to the malarial element which is a powerful producer of disease; and, thirdly, during the past three months there has been a mass of animal and vegetable matter undergoing decomposition in our streets in connection with the melting snow and ice. These conditions, sanitary science teaches us, are most prolific for the production of disease. Now, when we come to add these three factors together—to unite them—is it strange that there should have been great mortality in this city? And, sir, unless a change is effected—unless the causes for the production of disease are removed—I predict, as the coming months pass on, that an epidemic will sweep over the city

which will arouse the citizens from their lethargy in regard to sanitary measures.

The Plague.

This scourge has been ravaging the banks of the lower Euphrates and the villages of Mesopotamia. Quarantine against it has been declared by the Egyptian authorities. In spite of this it is said already to have crossed the Mediterranean, and one or more deaths from it have been reported at Seville, Spain. The littoral cities of Southern Europe are by no means in such superior sanitary condition that all danger is averted of another experience such as Marseilles had in 1722.

Philadelphia Academy of Surgery.

At the next meeting, Monday evening, April 4th, Dr. J. C. Hutchison, of Brooklyn, will read a paper on "The Treatment of Hip-joint Disease."

Personal.

—Dr. Robert S. Ives practiced medicine in New Haven, Connecticut, more than a hundred years ago, and his son, grandson and great grandson, nephew and grand-nephew have all followed the same profession in the same city, bringing the record down to the present day without interruption.

—Dr. Daniel F. Kimball, made notorious by his connection with the Lynn, Massachusetts, trunk tragedy, died in the State Prison at Concord, on Tuesday, March 22d, of a complication of diseases. He was about forty-three years of age. His sentence was for seven years.

OBITUARY NOTICES.

—Dr. Charles Osgood, a prominent citizen of Norwich, Conn., formerly Mayor of the city, and President of the New London Northern Railroad Company, died, March 19th, after a long illness.

—Dr. Horatio Nelson Loomis died in Buffalo, on March 23d. He was born in Franklin, New London County, Conn., March 25th. 1807. His father came West and settled in Sangersfield, Oneida County, New York, when Horatio was five years old. He attended four full courses of medical lectures at Fairfield Medical College, in Herkimer County, New York, commencing in 1824. He was graduated in January, 1828, and in the following April settled at Palmyra, Wayne County, in company with Dr. Gain Robinson and his son Cassius. He continued with them three years, when the elder Robinson died and the younger removed to Michigan. Dr. Loomis was immediately joined by the late Prof. Delamater. The copartnership continued for five years. Dr. Delamater removed to Cleveland, Ohio, and Dr. Loomis went to Buffalo, in 1836.

—Colonel Thomas A. Scott, of this city, has presented $50,000 to the Jefferson Medical College, $30,000 to the Orthopædic Hospital, and $20,000 to the Children's Department of the Episcopal Hospital.

QUERIES AND REPLIES.

An Ethical Question.

Dr. A., being sick, calls Dr. B. to see him, and requests Dr. B. to assume the charge of his patients.

Patient No. 1 is sick at the house of one of Dr. B.'s families. Dr. B. has received from Dr. A. his diagnosis and course of treatment. Dr. B. calls on patient and diagnoses an entirely different disease. Dr. B. tells the patient and family that Dr. A.'s diagnosis is incorrect, and gives reasons for the correctness of his own diagnosis. Dr. B. changes treatment to suit his own diagnosis, and then informs Dr. A. of his diagnosis and change of treatment.

Dr. A. calls next day, receives his pay and the comforting assurance "if we want you any more we'll let you know."

Question 1st. Was it proper or ethical for Dr. B. to contradict Dr. A.'s diagnosis, and to detail his own diagnosis to the patient and family?

2d. If Dr. B. differed with Dr. A., would it not have been ethical to detail that difference to Dr. A. and to no one else?

Ans.—It was evidently very unethical for Dr. B. to take such action.

Dr. S. P. R., of Pa., writes:—Can you inform me whether, in the manufacture of pepsin preparations, beef extracts, peptones, dry blood, etc., sufficient heat is used to destroy the vitality of the cysticerci of the tænia, or ova of other parasites which may be present?"

Ans.—The heat is not sufficient to destroy parasitic ova; but few or no cases have been received of infection from this source.

MR. EDITOR.—Will you or some reader kindly state the name and address of one or more veterinary colleges, and the term of study required for graduation?

California. C. M.

Ans.—The leading veterinary college in the United States is the American Veterinary College, 141 West 54th St, New York city.

MARRIAGES.

BASSETT—HALLOWELL.—At Friends' Meeting House, Fifteenth and Race, on the 23d instant, Dr. Franklin L. Bassett, of Philadelphia, and Anna E. Hallowell, daughter of the late John Edgar Hallowell, of Sandy Spring, Maryland.

CARMAN—HORTON.—In White Plains, N. Y., March 9th, 1881, by the Rev. O. Haviland, assisted by Rev. J. M. King, D.D., Albro R. Carman, M.D., of New York, and Gertie, daughter of Mr Thomas Horton, of White Plains, N. Y.

LAVERTY—FREY.—On Feb. 3d, 1881, at St. Paul's Lutheran Church, York, Pa., by the Rev. L. A. Gotwald, D.D., DeWitt C. Laverty, M.D., of Middletown, Pa., and Bertha, eldest daughter of George S. Frey, of York, Pa.

SIMMONS—SHIBLEY.—At Rural Grove, Mass., at the residence of the bride's parents, March 2d, by the Rev. G. C. Simmons, assisted by the Rev. E. D. Hammond, Herbert M. Simmons, M.D., of Cœymans, and Miss Hattie Shibley, of Rural Grove.

DEATHS.

MONELL.—On the evening of March 7th, Dr. Joseph S. Monell, at Green Cove Springs, Florida.

SELTZER.—On the 23d instant, Dr. John H. Seltzer, in the thirty-sixth year of his age.